THE WESTERN WORLD

Guide and Hand-Book

OF

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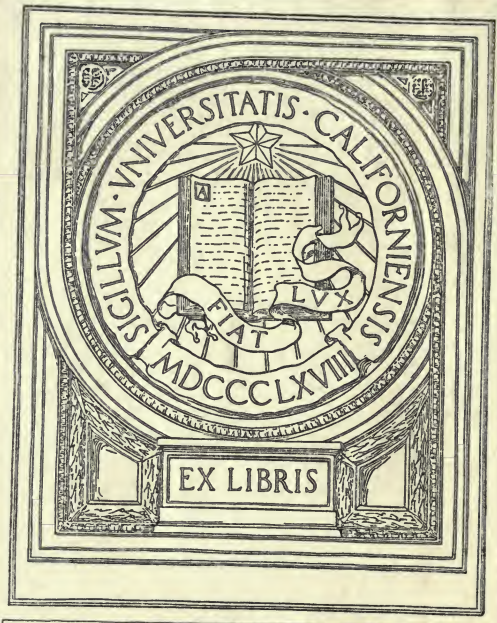

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THE

WESTERN WORLD

GUIDE AND HAND-BOOK

OF

USEFUL INFORMATION.

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CONTENTS.

HISTORIES OF EACH OF THE STATES FROM EARLIEST TIMES, descriptive of their topography, soil, climate, rivers, mountains, natural wonders, population, area, islands, lakes, mines, products, manufactures, industries, cities, school systems, collection and exemption laws, date of holding elections, number of representatives, senators, congressmen, and presidential electors, number soldiers in the field, price of land cleared and in forest, extent of forest, number of different callings, rate of interest, **usury laws, peddlers' or drummers' license laws, divorce laws, mining laws, description of public lands, list of lands subject to the various forms of entry,** list land offices, opportunities for homes or enterprise, rainfall, health, ports of entry, population (male, female and foreign), number of Indians, mineral resources, nicknames of states and for whom or what they are named. Miles of railroad and canals, tidal frontage, **state land laws,** number of counties and names.

A COLORED MAP of each State and Territory will be found accompanying its history.

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GOVERNMENT LANDS.

Government lands exist in Alabama, Arkansas, Arizona, California, Colorado, Dakota, Florida, Iowa, Idaho, Kansas, Louisiana, Michigan, Minnesota, Mississippi, Missouri, Montana, Nebraska, Nevada, New Mexico, Oregon, Utah, Wisconsin, Wyoming and Washington. In Indiana, Illinois and Ohio, also a very few isolated tracts remain. The states and territories are divided into districts, in each of which is a land office, where land may be entered and information relating to the same obtained. The land offices for Indiana, Illinois and Ohio are abolished, and their business is transacted at the General Land Department, Washington, D. C. Alaska lands are not open to any form of entry—and the same is true of Indian territory and the various reservations. A list of land offices within the same is given in the description of each state, pages 97 to 200. Letters should be addressed, "U. S. Land Office, at ———— ————." Each office controls all land in its district.

THE PUBLIC DOMAIN is divided into *agricultural*, *mineral*, *desert*, *timber* and *coal* lands, each governed by different laws of acquisition.

TITLE TO AGRICULTURAL LANDS may be acquired by purchase at public sale or private entry, by pre-emption, homestead, timber-culture and other laws, and by virtue of military service, warrants, script, etc.

AT PUBLIC SALE, lands may be purchased by any one who shall be the highest bidder when offered pursuant to proper notice.

AT PRIVATE ENTRY such lands may be purchased as have been publicly offered and remain unsold unless subsequently withdrawn or reserved.

THE PRICE cannot be less than $1.25 per acre in any case. Lands at this price are called *minimum lands*. Lands lying along railroads within the limits of the alternate section grant to said roads, and yet held by the government, are held at $2.50 per acre, and are called *double minimum lands*.

APPLICATIONS TO PURCHASE must be written, and describe the land sought and its area. The law of first come first served is rigidly enforced, and if the land applied for is vacant a patent issues on payment in due course.

WARRANTS issued to soldiers as bounty for services may be located upon any public land subject to private entry at the time of such location, application being made the same as if cash were to be paid as the consideration for the land. The warrant must be duly assigned. The amount of land called for by the warrant must be located in a compact body. Warrants were not issued in the late war, the bounty then being paid in money. Warrants are locatable only on minimum lands, and where the holder wishes to obtain double minimum land he must furnish a warrant of such denomination as will, at the value of $1.25 per acre, cover the price of the land, or he must pay one dollar and a quarter per acre in addition to the surrendered warrant.

If there is a small excess in the area of the tract over the quantity called for in the warrant, such excess may be paid for in money. If the tract contains a less number of acres, rated at $1.25 per acre, the warrant must be surrendered in full satisfaction.

THE FEES FOR ENTRY BY WARRANT payable at the time of location to the register and receiver of the gov-

ernment land office in the district wherein the lands lie are as follows:

For a 40-acre warrant, 50 cents each to the register and receiver; total $1 00
For a 60-acre warrant, 75 cents each to the register and receiver; total 1 50
For an 80-acre warrant, $1 each to the register and receiver; total 2 00
For a 120-acre warrant, $1.50 each to the register and receiver; total 3 00
For a 160-acre warrant, $2 each to register and receiver; total, 4 00

AGRICULTURAL COLLEGE SCRIP may be used to pay for minimum land, not mineral, at private entry, and is restricted to a technical "*quarter section*,"—that is, land embraced by the quarter-section lines; or it may be located on a *part* of a "quarter section," where such part is taken as in full for a quarter; but it cannot be applied to different subdivisions to make an area equivalent to a quarter section. The manner of proceeding to acquire title with this class of paper is the same as in cash and warrant cases, the fees to be paid being the same as on warrants. The location of this scrip at private entry is restricted to *three* sections in *each township*, and 1,000,000 *acres* in *any one state*. This scrip may be used also to pay pre-emption claims, in the same manner and under the same rules and regulations as govern the application to pre-emption by military warrants, and without restriction on entries in any township or state. Commuted homesteads may also be paid for with scrip.

PRIVATE LAND CLAIM SCRIP may be used in the same way as the above.

PRE-EMPTION rights secure to residents upon public lands the right to buy within a certain time in preference to other purchasers. Heads of families, widows, and single persons 21 years old, who are citizens of the United States, or have legally declared their intention to become such, can pre-empt 160 acres of *offered*, *unoffered* or *unsurveyed* lands where the Indian title is extinguished, provided the pre-empter has not moved from land belonging to him in the *same* state or territory onto the public land, and provided he does not own 320 acres of land in *any* state or territory, or has not previously exercised the right of pre-emption.

THE PRICE of land to pre-emptors on due filing is $1.25 per acre. **On Offered Lands** the pre-emptor must file in the land office for the district his declaration of settlement within thirty days from the date of same, and must make proof of actual residence on and cultivation of the tract within one year, and secure the same by making payment in cash, warrants or scrip. **On Unoffered Land when Surveyed** the claimant must file his declaratory statement within three months from date of settlement, and make proof and payment within 33 months from date of settlement. **On Unsurveyed** lands no definitive proceedings can be had as to the completion of the title until the surveys are made and returned to the district land office. After such return the proceedings are the same as on unoffered lands. A filing without actual settlement is illegal, and no rights are acquired thereby. The existence of a pre-emption filing on a tract of land does not prevent another filing for the same land, subject to any valid rights acquired by virtue of any former filing and settlement.

RELINQUISHMENT of pre-emption filings may be made by claimants in writing at the proper district land office, or the relinquishment may be executed by the claimant on the back of the declaratory statement receipt. *The second filing* of a declaratory statement by any pre-emptor who was qualified at the date of his first filing is illegal. Where the first filing, however, was illegal from any cause not the willful act of the party, he has the right to make a second and legal filing.

FINAL PROOF of compliance with the law is made by filing a written notice at the land office describing the land and naming

witnesses, accompanied by sufficient money to pay for publishing the register's notice in the nearest newspaper once a week for thirty days. To save expense several notices may be published together. The final proof must be made in court.

IF A PRE-EMPTOR DIE without establishing his claim within the period limited by law, the title may be perfected by the executor, administrator, or one of the heirs, by making the requisite proof of settlement and payments, the entry to be made in the name of "the heirs" of the deceased settler, and the patent will issue accordingly. The legal representatives of the deceased pre-emptor are entitled to make the entry at any time within the period during which the pre-emptor would have been entitled to do so had he lived. The rights of a claimant who becomes insane may be proved up, and his claim perfected, by any person duly authorized to act for him during his disability.

GRASSHOPPER SUFFERERS who are pre-emptors may leave their pre-emptions for not more than one year continuously and retain their rights under certain regulations fixed by the Commissioner of the Land Department. The time of making payment may also be extended under such circumstances at the discretion of said Commissioner.

FEES for pre-emption are for declaratory statement $2, except in the Pacific states and territories, where it is $3.

THE HOMESTEAD laws enable actual settlers on public lands to acquire title to not more than 160 acres without charge, except the entry and other fees fixed by law. *The qualifications* of the homesteader are that he be 21 years old, or the head of a family, a citizen of the United States, or has legally declared his intention to become such, and that the entry is made for his exclusive use and benefit, and for actual settlement and cultivation. *A deserted or divorced wife*, dependent upon her own resources, may make a homestead entry. *All United States lands* not denominated mineral or coal lands, or reserved, are subject to homestead entry except double minimum lands made such since January 1, 1861, where the same lies in odd sections. In Arkansas and Missouri the odd sections may also be taken. A homestead settler on unsurveyed public land not yet open to entry must make entry within three months after the filing of the township plat of survey in the district land office. When two or more parties apply at the same time to enter a tract, preference is given to the one who has actually settled on the same. When there is no settlement it is awarded to the highest bidder. Priority in all cases governs.

THE FEES for homestead entries, *payable when application is made*, are in Alabama, Arkansas, Dakota, Florida, Iowa, Kansas, Louisiana, Michigan, Minnesota, Missouri, Nebraska, Indiana, Ohio, Illinois, Wisconsin and Mississippi: Land at $2.50 per acre: For 160 acres, $18.00; for 80 acres, $9.00; for 40 acres, $7.00: Land at $1.25 per acre: For 160 acres, $14.00; for 80 acres, $7.00; for 40 acres, $6.00. In Arizona, California, Colorado, Idaho, Montana, Nevada, New Mexico, Oregon, Utah, Washington and Wyoming: Land at $2.50 per acre: For 160 acres, $22.00; for 80 acres, $11.00; for 40 acre, $8.00: Land at $1.25 per acre: For 160 acres, $16.00; for 80 acres, $8 00; for 40 acres, $6.50. The fees for final proof in the first named states are $4.00, and in the last named states $6.00, for 160 acres of $1.25 land, and double these for $2.50 land, smaller tracts being charged proportionally. The fees for reducing testimony to writing in making final proof are, in the former states, 15 cents, and in the latter states and territories 22½ cents for each 100 words. No other land office fees are payable in homestead cases.

TO COMPLETE TITLE the homesteader must within 6 months after entry, begin to live upon the land and must continue his residence there for five years without a break. At the end of five years, the requirements as to proof and fees being complied with a patent issues. During these five years the land must be cultivated, but stock-raising and dairying are construed as cultivation.

GRASSHOPPERS.—The exceptions in favor of pre-emptors also apply to homestead entries. When a homestead settler has been prevented by climatic reasons from establishing actual residence within six months from entry, the Commissioner of the General Land Office may, in his discretion, allow twelve months from that date in which to commence his residence.

FINAL PROOF is made in the same manner as in pre-emptions.

RIGHTS OF CLAIMANTS WHO BECOME INSANE may be proved up and perfected in the same manner as in the case of pre-emptions.

THE HEIRS of dying homesteaders may complete the claim, the title passing to the widow if she proves up, or if all are minors the homestead may be sold for cash, or the title completed as may be decided upon. If sold the purchaser gets title from the government. A homestead right cannot be devised away from a widow or minor children. In case of the death of a person after having entered a homestead, the failure of the widow, children, or devisee of the deceased to take up residence on the land within six months after the entry, or otherwise to fulfill the demands of the letter of the law as to residence, will not necessarily subject the entry to forfeiture on the ground of abandonment. If the land is cultivated in good faith the law will be considered as having been substantially complied with.

CONVERSION OF PRE-EMPTIONS INTO HOMESTEADS.—A person who has made settlement on a tract and filed his pre-emption declaration therefor, may change his filing into a homestead if he continues in good faith to comply with the pre-emption laws until the change is effected; and the time during which he has resided upon and claimed the land as a pre-emptor will be credited upon the period of residence and cultivation required under the homestead laws. In his first homestead affidavit he must set forth the fact of a previous pre-emption filing, the time of actual residence thereunder, and the intention to claim the benefit of such time, as provided for in the act. In making final proof on his homestead entry he is required, in addition to the usual affidavit and proof, to make the prescribed "pre-emption homestead affidavit."

COMMUTATION OF HOMESTEAD ENTRIES.—If a homestead settler does not wish to remain five years on a tract, he may pay for it with cash, warrants, or agricultural college or private claim scrip. To entitle him to the land upon making such payment he must prove actual settlement, improvement and cultivation from the date of entry to the time of offering proof—which must be a period of not less than six months; the form of proof to correspond with the regular final proof in homestead cases. A person commuting a homestead entry when he has not actually resided upon the land and improved and cultivated it as required by law, *forfeits all rights to the land and to the purchase money paid*, and in addition thereto renders himself liable to criminal prosecution.

THE SALE OF A HOMESTEAD claim by the settler before completion of title vests no title or equities in the purchaser, and is not recognized by law. In making final proof, the settler is by law required to swear that no part of the land has been alienated except for church, cemetery or school purposes, or the right of way of railroad.

RELINQUISHMENT OF HOMESTEAD may be made in the same way as in pre-emption claims. As *but one homestead is allowed*, a settler relinquishing or abandoning his claim cannot thereafter make a second entry; although where the entry is canceled as invalid for some reason other than abandonment, and not the willful act of the party, he is not thereby debarred from entering again, if in other respects entitled, and may have the fees and commissions paid on the canceled entry refunded on proper application. Where a party makes a selection of land for a homestead, he must abide by his choice. If he has neglected to examine the character of the land prior to entry and it proves

to be barren or otherwise unsatisfactory, he must suffer the consequences of his own neglect. In some cases, however, where obstacles which could not have been foreseen, and which render it impracticable to cultivate the land, are discovered subsequently to entry (such as the impossibility of obtaining water by digging wells or otherwise), or where, subsequently to entry, and through no fault of the homesteader, the land becomes useless for agricultural purposes (as where by the deposit of "tailings" in the channel of a stream a dam is formed, causing the waters to overflow), the entry may, in the discretion of the Commissioner of the General Land Office, be canceled and a second entry allowed. But in the event of a new entry, the party will be required to show the same compliance with law in connection therewith as though he had not made a previous entry, and must pay the proper fees and commissions upon the same.

CONTEST ON GROUND OF ABANDONMENT. — Where application is made to contest the validity of a homestead entry on the ground of abandonment, the party must file his affidavit with the district land officers, accompanied by the affidavits of one or more witnesses in support of the allegations made, setting forth the facts on which his application is founded, describing the tract and giving the name of the settler. Upon this the officers will set apart a day for hearing, giving all the parties in interest due notice of the time and place of trial. The contestant must pay the costs, and if successful, has a preference right of entry for thirty days.

ADJOINING FARM HOMESTEADS.—A person possessing the requisite qualifications under the homestead law, owning and residing on land not amounting to a quarter-section, may enter other land adjoining his to an amount which shall not, with the land already owned, exceed 160 acres. He must fulfill the requirements of the homestead law, except that he need not move on to the tract so entered—residence on his own adjoining land being sufficient.

ADDITIONAL HOMESTEADS.—Under the old laws only minimum lands, or their equivalent, were subject to homestead, and as a consequence, but eighty acres of double minimum land could be taken. By subsequent enactments a homesteader was permitted to take 160 acres of double minimum lands for a homestead, with such exceptions as are given above, and in justice to parties who entered such lands under the old law, and were restricted to 80 acres, it is provided that any such person may enter 80 acres additional, adjoining his original entry, if such adjoining lands are subject to entry. Such additional homestead entry is allowable, even though the original homestead entry has been commuted to a cash entry. A woman who has married since making the original entry is not thereby disqualified from making an adjoining homestead entry. In case, however, there should be no land subject to entry adjoining the original homestead, or if for any other reason the homestead party does not desire to select adjoining land, he may surrender his original entry to the Government for cancellation, and be entitled to enter land elsewhere, under the homestead law, the same as if the surrendered entry had never been made. A person making additional entry, or new entry after surrender and cancellation of his original entry, can do so without payment of further fees and commissions. The residence and cultivation of such person upon the land embraced in his original entry shall be considered residence and cultivation for the same length of time upon the land embraced in his new entry, and will be deducted from the five years' residence and cultivation required by law; *provided*, that in no case shall a patent issue upon an adjoining or new homestead entry until the person has actually, and in conformity with the homestead laws, resided upon and cultivated the land embraced therein for at least one year. Removal onto the adjoining new entry is not necessary. Soldiers and sailors were not restricted to 80 acres under the old law, and cannot make additional entries under the new acts. Odd sections

of double minimum lands made double minimum since January 1, 1861, are not subject to additional entry, except in Arkansas and Missouri.

SOLDIERS' AND SAILORS' HOMESTEADS.—Any officer, soldier, seaman, or marine who served for not less than 90 days in the Army or Navy of the United States during the rebellion, and who was honorably discharged, can enter 160 acres of land, including the alternate reserved sections along the line of *any* railroad or other public work. The time of service, or if discharged on account of wounds or disabilities incurred in the line of duty, the whole term of enlistment, shall be deducted from the period of five years during which an ordinary claimant must, to perfect title, reside upon and cultivate the entered tract; but the party must, in every case, reside upon, improve, and cultivate his homestead for a period of at least one year after he shall have commenced his improvements. A party applying for the benefit of this provision of the law must file with the register and receiver a certified copy of certificate of discharge, showing when he enlisted and when he was discharged; or the affidavit of two respectable, disinterested witnesses corroborative of the allegations contained in the prescribed affidavit on these points, or, if neither can be procured, his own affidavit to that effect. A soldier is held to have exhausted his homestead right by filing his declaratory statement; the right to file being a privilege granted to soldiers in addition to the ordinary privilege only in the matter of giving them power to hold their claims for six months after selection, before entry; but is not a license to abandon such selection with the right thereafter to make a regular homestead entry independently of such filing.

SOLDIERS' WIDOWS, if unmarried, or their minor children, if the widows are dead or married, may enter in the same way as the soldier himself. If he died in service, they are entitled to deduct the whole time of enlistment from the period necessary to complete title. Minors can act only by legal guardians. Neither the guardian nor the minor children are required to reside upon the land, but the same must be cultivated and improved for the period of time during which the father would have been required to reside upon the tract.

SOLDIERS' FILING. A soldier may file a declaratory statement for land which he intends to enter. The fee is $2, except in the Pacific states and territories, where it is $3. This statement may be filed personally or by an agent. The entry can be made only by the soldier *in person* at the local land office, and he must commence his settlement on the land within six months after his filing. A soldier's homestead declaratory statement does not prevent anybody else from making an entry of the same land, subject to such right as the soldier may acquire by virtue of actual residence on the land and full compliance with law. If the soldier does not establish his residence on the tract as required, the next comer may take the land.

SOLDIERS' ADDITIONAL HOMESTEAD ENTRY.—Any officer, soldier, seaman, or marine, or his unmarried widow or minor children who served for not less than 90 days in the army or navy of the United States during the rebellion, who had, prior to June 22, 1874, made a homestead entry of less than one hundred and sixty acres, may enter an additional quantity of land, adjacent to his former entry or elsewhere, sufficient to make, with the previous entry, one hundred and sixty acres. This right is personal and not subject to assignment or lien, and entry must be made in person. The fees paid for the additional entry when the original one is consummated is the same as for the original entry.

PARTIAL WAIVER OF HOMESTEAD RIGHTS.—The choice to take less than the law allows, is construed as a waiver of claim for a larger quantity; and the same in case of an adjoining farm entry or soldier's additional entry.

INDIANS may make homestead entries but cannot commute the same to cash entries, nor can they incumber or transfer

their claims by their own act or through judgment of court. The land is theirs, absolutely and inalienably, for twenty years after issue of patent.

EXEMPTIONS OF HOMESTEADS.—Lands acquired by homestead are exempt from liability for debts contracted prior to the issue of the patent therefor.

SPECIAL SURVEYS.—When the settlers in any township (the land in which is not mineral or reserved to the Government) desire a government survey thereof, and file an application therefor, and deposit in any government depository to the credit of the United States a sum sufficient to pay for such survey, if the township is within the range of the regular progress of the public surveys, the commissioner of the general land office will instruct the surveyor general to survey such township. The amount so deposited by settlers may be applied in part payment for their lands. The certificates issued for such deposits are assignable by indorsement; and while not receivable in payment for land at cash entry, except from the settlers who made the deposit, such certificates will be received in payment from settlers under the pre-emption law, or in commutation of homestead entries, but the act of August 7, 1882, restricts the application of certificates of deposit issued subsequently to its passage to lands situated in the district embracing the township the surveying of which is to be paid out of such deposit.

TIMBER CULTURE entries may be made by any person twenty-one years old or the head of a family who is or has declared legally his, or her, intention of becoming a citizen of the United States, provided the right has not been before exercised. The amount of land so entered must not exceed 160 acres and must be all prairie land. The applicant must swear that his entry is made for the cultivation of timber and for his own exclusive use and benefit; that he makes the application in good faith and not for the purpose of speculation, nor directly or indirectly for the use or benefit of any other person or persons whomsoever; and that he intends to hold and cultivate the land and to wholly comply with the provisions of the act.

THE PAYMENTS required by law on a timber-culture entry are as follows: For eighty acres or less, fee $5, to be paid at date of entry; commissions $4; total $9: For more than eighty acres, fee $10 at date of entry; commissions $4; total $14. Besides, in each case, $4 when final proof is made. No other fee, charge, gratuity, or reward is permitted to be paid or received for any services rendered at district land offices in connection with such entries.

No distinction is made, as to area or the amount of fee and commissions, between minimum and double-minimum lands. A party may enter 160 acres of either on payment of the prescribed fee and commissions.

AMOUNT OF TIMBER TO BE CULTIVATED.—The law requires that five acres on a quarter-section shall be broken or plowed the first year, and five acres the second year. The second year the first five acres must be cultivated to crop or otherwise. The third year the second five acres must be cultivated to crop or otherwise, and the first five acres must be planted in timber, seeds or cuttings. The fourth year the second five acres must be planted in timber, seeds or cuttings. Ten acres are thus to be plowed, planted and cultivated on a quarter-section, and the same proportion when less than a quarter-section is entered. If the trees, seeds, or cuttings are destroyed by grasshoppers or by extreme and unusual droughts, the time of planting may be extended one year for every year of such destruction, upon the filing in the local office of an affidavit by the entryman, corroborated by two witnesses, setting forth the destruction and asking the extension of time provided for by the act. *The following classes of trees* are recognized as "timber" within the meaning of the law, viz: Ash (including mountain ash or service-tree), alder, basswood, beech, birch, box-elder, black walnut, butt rnut (otherwise called white walnut), cedar,

chestnut, cottonwood, elm, fir, hickory, honey-locust, larch, maple, oak, pine, spruce, sycamore (otherwise called buttonwood or cotton-tree), white willow, whitewood (or tulip-tree); and other trees recognized in the neighborhood as of value for timber, for firewood or domestic use, or for commercial purposes. Fruit trees and shrubbery cannot be classed as "timber," and their cultivation is not sufficient to satisfy the demands of the law.

FINAL PROOF can be made at the expiration of eight years from date of entry. It must be shown that for the said eight years the trees have been planted, protected and cultivated as aforesaid; that not less than 2,700 trees were planted on each of the ten acres, and that at the time of making proof there are growing at least 675 living thrifty trees to each acre.

Where less than one quarter section of land is entered, the same proportionate amount of plowing, planting, and cultivation of trees must be done as required in entries of 160 acres.

If the trees, seeds, or cuttings are destroyed in any one year they must be replanted. A party will not be released from a continued attempt to promote the actual growth of timber or forest trees. A failure in this respect will subject the entry to cancellation. In computing the period of cultivation the time runs from the date of entry, if the necessary acts of cultivation were performed within the proper time.

LIABILITY FOR DEBT contracted previous to the issue of final certificate does not attach to land acquired under this law.

Land acquired under any of the foregoing laws and relinquished is at once open to settlement or entry again.

TIMBER AND STONE LANDS. Surveyed public lands in California, Oregon, Nevada and Washington territory, not included within any military, Indian or other reservation, which are unfit for cultivation, and consequently for disposal under the homestead or pre-emption laws, non-mineral in character, and which have never been offered at public sale, valuable chiefly for the timber upon them or the stone they contain, may be purchased by citizens of the United States, or persons who have declared their intention to become such, in quantities not exceeding one hundred and sixty acres to any one person or association of persons, at a price of not less than $2.50 per acre. But one purchase under this act is permitted, and the land must be declared, under oath, to be purchased for the sole use of the applicant. Proof of the character of the land must be made by applicant before the receiver of the land office. *The fees* are $10 for the entry and 22½ cents per 100 words for testimony reduced to writing for claimant. *An Association* applying to purchase such lands, each of the persons must prove the requisite qualifications, and their names must appear in and be subscribed to the sworn statement, as in case of an individual person. They must also unite in the regular application for entry, which will be made in their joint names as in other cases of joint cash entry.

SALINE LANDS.—Lands adjudged as saline after due inquiry are offered for sale, after public notice, at the local land office of the district in which the same shall be situated, and sold to the highest bidder for cash, at a price not less than $1.25 per acre. In case said lands are not sold when so offered, they are subject to private sale for cash, at a price not less than $1.25 per acre, in the same manner as other public lands. This law is not applicable to lands in the territories, nor to any within the states of Mississippi, Louisiana, Florida, California and Nevada, none of which have had a grant of salines by act of Congress.

DESERT LANDS.—By "desert land" is meant land "which will not without irrigation, produce some agricultural crop." The expression "*some* agricultural crop" does not refer solely to the amount of the crop; it refers also to the kind. If the land will produce "some" crop of a kind and in amount sufficient to make the cultivation reasonably remunerative, it is not desert. Land along streams, or near bodies of water, which, without

artificial irrigation, will produce grass sufficient for hay, is not "desert land" within the meaning of the law, and is not subject to desert entry. Title to desert lands can be acquired, under the restrictions of the law only in California, Oregon, Nevada, Washington, Idaho, Montana, Utah, Arizona, New Mexico, Wyoming and Dakota. The amount of land which may be entered by any one person under the desert-land law cannot exceed one section, or 640 acres, which must be in compact form. The requirement of compactness will be held to be complied with on surveyed lands when a section, or part thereof, is described by legal subdivisions as nearly in the form of a technical section as the situation of the land and its relation to other lands will admit, although parts of two or more sections may be taken to make up the quantity or equivalent of one section. But entries running along the margin or including both sides of streams, or being continuous merely in the sense of lying in a line so as to form a narrow strip, or in any other way showing a gross departure from all reasonable requirements of compactness, will not be admitted. In no case, where the full quantity of 640 acres is entered, will the side line on either side be permitted to exceed one mile and a quarter; and less in proportion in case the entry embraces less than a whole section or its equivalent.

METHOD OF ACQUIRING TITLE.—A party desiring to avail himself of the privileges of the desert-land act must file, at the proper district land office, a declaration under oath. It must be set forth that the applicant is a citizen of the United States, or that he has declared his intention to become such—in which case a duly certified copy of his declaration of intention to become a citizen must be presented and filed, that he has made no other declaration for desert lands under the provisions of this act, and that he intends to reclaim the tract of land applied for by conducting water thereon, within three years from the date of his declaration. The application must describe the land by legal subdivisions if surveyed, and as accurately as possible if unsurveyed. The land must be proved to be "desert." Such application, etc., being satisfactory, twenty-five cents per acre must be paid the receiver for the land. Claims on unsurveyed lands must be made to conform to the legal subdivisions when the survey shall be made.

FINAL PROOF may be made at any time within three years that enough water has been conducted on the land to reclaim the same. If satisfactory proof of this is made, and $1 more per acre is paid, a patent issues and title is complete. Water must be conveyed on to every forty acres of the tract.

REPAYMENTS are made by the government when land has been erroneously sold or entered so that the sale cannot be confirmed, but the same does not extend to fraud as in cases where false proof has been made. When application for repayment is made, all receipts, patents, etc., must be surrendered and proper reconveyance made. The repayment may be made to heirs, executors, or assignees purchasing innocently. When land has been paid for at $2.50 per acre, and is afterward found to have been on the market at $1.25, the excess will be refunded.

MINERAL LANDS are reserved for sale under special laws. Such lands, surveyed or unsurveyed, are open to exploration or purchase by citizens of the United States, or those declaring their purpose to become such, under the laws and according to the local customs of miners when consistent with the laws of the United States.

THE LENGTH OF A CLAIM upon a lode bearing gold, silver, cinnibar, lead, tin, copper, or other valuable deposits, whether located by one or more persons, is limited to 1,500 feet, and the claim cannot be located until after the discovery of the vein thereon. No claim can extend more than 300 feet on each side of the middle of the vein at the surface, nor shall it be limited by mining regulations to less than 25 feet on each side of said middle at the surface. The end lines of each claim must be parallel. To such locators is given the exclusive right of posses-

sion and enjoyment of all the surface included within the lines of their locations, and of all veins, lodes and ledges throughout their entire depth, the top of which lies inside of such surface lines extended downward vertically, although such veins may depart from a perpendicular in their course downward and extend outside the vertical side-lines of such surface locations. But their right of possession to such outside parts of such veins or ledges shall be confined to such portions thereof as lie between vertical planes drawn downward as above described, through the end-lines of their locations, so continued in their own direction that such planes will intersect such exterior parts of such veins or ledges. The locator or possessor of a vein which extends in its downward course beyond the vertical lines of his claim is not authorized to enter upon the surface of a claim owned or possessed by another.

Where a tunnel is run for the development of a vein, or for the discovery of mines, the owners of such tunnel shall have the right to all veins within 3,000 feet from the face of such tunnel on the line thereof, not previously known to exist, discovered in such tunnel, to the same extent as if discovered from the surface; and locations on the line of such tunnel of veins or lodes not appearing on the surface, made by other parties after the commencement of the tunnel, and while the same is being prosecuted with reasonable diligence, shall be invalid; but failure to prosecute the work on the tunnel for six months shall be considered an abandonment of the right to all undiscovered veins on the line of the same.

The miners of each mining-district may make regulations not in conflict with the laws of the United States or with the laws of the state or territory in which the district is situated, governing the location, manner of recording, amount of work necessary to hold possession of a mining-claim, subject to the following requirements: The location must be distinctly marked on the ground so that its boundaries can be clearly traced; on each claim located not less than *$100 worth of work must be done or improvement made each year* until patent issues; when several claims are held together all the work or improvement may be upon one of them. Where there is failure to meet these requirements the claim is again subject to location, unless work be begun on it by the original locator or his representatives before the application for new location is made. If a claim is owned by several parties, and one or more fails to do his part, he may be given ninety days' notice, when, if still delinquent, his interest passes to those of the partners who have made the proper improvement. Upon due application, after $500 worth of work has been done on a claim and the payment of $5 per acre therefor, a patent to the land issues, unless there have been adverse claims, when the matter will be adjudicated. The lines of a claim need not conform with the lines of a congressional survey.

PLACER CLAIMS are subject to entry as above, but when upon surveyed lands must conform to the lines thereof. No placer of more than twenty acres for each individual claimant can be entered by one person or association, and the rights of a previous homesteader or pre-emptor on the tract are respected. Legal subdivisions of forty acres may be subdivided into ten-acre tracts, and holders of contiguous claims of any size may make joint entry thereof. Where such person or association, or their grantors, have held and worked their claims for the period prescribed by the statute of limitations for mining claims of the state or territory where the same may be situated, evidence of such possession and working of the claims for such period shall be sufficient to establish a right to a patent thereto in the absence of any adverse claim; but nothing in this chapter shall be deemed to impair any lien which may have attached in any way whatever to any mining claim or property prior to the issuance of a patent. Where the same person, association or corporation is in possession of a placer claim, and also a vein or lode included within the boundaries thereof, application shall be made for a patent for the

placer-claim, with the statement that it includes such vein or lode, and in such case a patent shall issue for the placer-claim, subject to the provisions of this chapter, including such vein or lode, upon the payment of $5 per acre for such vein or lode claim and twenty-five feet of surface on each side thereof. The remainder of the placer-claim, or any placer-claim not embracing any vein or lode claim, shall be paid for at the rate of $2.50 per acre, together with all costs of proceedings; and where a vein is known to exist within the boundaries of a placer-claim, an application for a patent for such placer-claim which does not include an application for the lode claim shall be construed as a conclusive declaration that the claimant of the placer-claim has no right of possession of the vein or lode claim; but where the existence of a vein or lode in a placer-claim is not known a patent for the placer-claim shall convey all valuable mineral and other deposits within the boundaries thereof.

The expenses of the survey of vein or lode claims, and the survey and subdivisions of placer-claims into smaller quantities than one hundred and sixty acres, together with the cost of publication of notices, shall be paid by the applicants, and they shall be at liberty to obtain the same at the most reasonable rates, and they shall also be at liberty to employ any United States deputy surveyor to make the survey. The Commissioner of the General Land Office shall also have power to establish the maximum charges for surveys and publication of notices and may designate the paper for publishing such notices and fix the charges therefor.

WHEN TWO OR MORE VEINS INTERSECT or cross each other, the prior location is entitled to all ore contained in the intersection, but the subsequent locations are given right of way through the space of intersection for working their mine beyond said space.

WHEN VEINS UNITE, the oldest location is entitled to the vein below the point of union, including all space of intersections.

WHEN NON-MINERAL LAND, not contiguous to the vein is used by the proprietor of the latter for mining or milling purposes, such land to the extent of 5 acres, may be embraced in the application for patent on the vein, and patented therewith on the same conditions and at the same price governing the vein. The owner of a mill or reduction works not owning a mine, may in the same way get a patent for his mill site. *Whenever, by priority of possession, rights to the use of water* for mining, agricultural, manufacturing, or other purposes, have vested and accrued, and the same are recognized and acknowledged by the local customs, laws, and the decisions of courts, the possessors and owners of the same are maintained and protected in them; and the right of way for ditches and canals for the purposes herein specified is acknowledged and confirmed; but whenever any person, in the construction of any ditch or canal, injures or damages the possession of any settler on the public domain, the party committing such injury or damage is liable to the party injured.

THE LAWS ABOVE GIVEN DO NOT APPLY to mineral lands in Michigan, Wisconsin, Minnesota, Missouri and Kansas, which are declared free and open to exploration and purchase in the same way as agricultural lands.

THE REMOVAL OF TIMBER from public lands for mining, building, agricultural and domestic purposes is permitted in Colorado, Nevada, New Mexico, Arizona, Utah, Wyoming, Dakota, Idaho and Montana, and in all other mining districts of the Union, where said lands are mineral and subject to entry only as such, but this privilege does not extend to railroads.

FEES AND CHARGES. The following rates are fixed as the maximum charges for newspaper publications: in a daily, $7 for each ten lines of space; in a weekly, $5 for the same space.

For publication of citations in contests involving the character

of lands, the charges shall not exceed $8 for five publications in weekly papers, or $10 for publications in dailies for 30 days.

The fees payable to the register and receiver for filing and acting upon applications for mineral-land patents are $5 to each, to be paid at the time of filing, and the like sum is payable to each by an adverse claimant at the time of filing his adverse claim.

COAL LANDS. Any person 21 years old, and a citizen of the United States, or who has declared his intention to become such, or any association of persons severally qualified as above, can enter by legal subdivisions, any quantity of vacant coal lands not otherwise appropriated or reserved, not exceeding 160 acres to each person, or 320 acres to each association, upon payment to the receiver of not less than $10 per acre for such lands, where the same shall be situated more than 15 miles from any completed railroad, and not less than $20 per acre for such lands as shall be within 15 miles of such road. The payment to be made within one year from the filing of the claim.

Any person or association of persons severally qualified as above, who have opened and improved, or shall hereafter open and improve, any coal mine upon public land, and are in actual possession are entitled to a preference-right of entry of the mines so opened and improved: *Provided*, That when any association of not less than four persons, shall have expended not less than $5,000 in working and improving any such mine, such association may enter not exceeding six hundred and forty acres, including such mining improvements.

All claims must be presented to the register of the proper land district within sixty days after the date of actual possession and the commencement of improvements on the land, by the filing of a declaratory statement therefor; but when the township plat is not on file at the date of such improvement, filing must be made within sixty days from the receipt of such plat at the district office.

The law authorizes but one entry by the same person or association. No association, any member of which shall have taken the benefit of this law, either as an individual or as a member of any other association, can enter or hold any other lands; and no member of any association, which shall have taken the benefit of this law can enter or hold any other land under its provisions.

In case of conflicting claims, priority of possession and improvement, followed by proper filing and continued good faith, determines the preference-right to purchase.

SYSTEMS OF SURVEYING.

Two systems of surveying are practiced in the United States, viz: by metes and bounds, and the Congressional township system.

BY METES AND BOUNDS is the system in force in the older states, where it was adopted from the old world before the Congressional system was invented. It consists simply in starting from some known or established point and running lines by the compass to other established points or given distances, returning eventually to the point of starting after enclosing the tract surveyed.

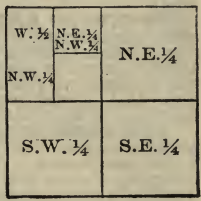
THE CONGRESSIONAL TOWNSHIP SYSTEM is the reputed invention of Thomas Jefferson, and is acknowledged to be the best known. It is in force in all the regions west of the Mississippi river and in Florida, Alabama, Mississippi, Ohio, Indiana, Illinois, Michigan, Wisconsin, and a portion of Tennessee. In many of these, however, there are "grants," "locations," etc., made prior to the adoption of the Congressional system. The system consists in first establishing what is called a *base line*, running east and west, and a *principal meridian*, running north and south, and both fixed by passing through some determined and certain point. Parallel with these lines at uniform distances of six miles are run other lines, those running east and west being called *town lines*, and those running north and south, *range lines*. These lines of course divide the district into sections six miles square, which are called *townships*. The location of a township is determined by the number of its towns north or south, that is, by the number of town lines it is north or south of the base line, which is always counted as one town line, and by its range east or west, that is, by the number of range lines it is east or west of the principal meridian, which is always counted as one range line. For instance a township beginning 18 miles north of a base line, and 30 miles west of a principal meridian, would be described as town 4, north, range 6, west. The townships are divided into 36 sections, each 1 mile square, and containing 640 acres, as shown in the diagram, thus:

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36

The sections are, as a rule, numbered from 1 to 36, as shown in the diagram, beginning at the northeast corner of the township

and running back and forth; but in a few states this method of numbering is departed from slightly. The sections are divided into quarter sections, each a half mile square and containing 160 acres, and these in turn are divided into four quarters, each of which is $\frac{1}{16}$ of a section, ¼ mile square, and contains 40 acres. Both quarters and sixteenths of a section are named by the points of the compass. The method of division is shown in the following diagram of a section:

Thus, the division marked as the N. E. ¼ represents 160 acres; division marked W. ½ of the N. W. ¼ represents 80 acres, and the divisions marked N. E. ¼ of the N. W. ¼ represents 40 acres. Sections frequently exceed or fall short of the prescribed 640 acres. They are most frequently excessive on the west border of a township. Such descriptions as the above are sufficient in deeds, the number of section, town and range being given.



LOCAL MINING LAWS.

The Pacific States, the Territories and Colorado, have all local laws regulating, to a greater or less extent, mining claims and operations within their borders. They make such laws at discretion, provided they do not conflict with the Federal laws, in which case they are void.

ARIZONA has no important local laws. Recording claims is charged for at $1 for first 100 words, and 20 cents for each additional 100.

CALIFORNIA. Use of running water is acquired by appropriation, and same may be diverted or place of diversion changed, and ditches, flumes, aqueducts, etc., extended if no injury is done others by the change. Priority of use gives priority of right. Notice of appropriation must be posted at point of diversion, setting forth the number of inches claimed at 4 inches pressure, the uses and places thereof and the means of diversion and size of same, and within 10 days after posting a copy of the notice must be recorded in the county recorder's office, and work be begun in 60 days, and prosecuted continuously. California school lands, which include sections 16 and 32 in each township, where mineral, are purchasable, after proper affidavit describing the land and setting forth the desire to buy, the occupation of but 40 acres by the applicant and the absence of other occupants, or that the township plat has been filed over six months, and the adverse occupation has existed longer than that period, at $2.50 per acre. Occupants making application to buy within six months after the filing of the township plat are preferred.

COLORADO. Counties have power to fix the width of mining claims within the limits prescribed by Congress. Where not so fixed, the width is 150 feet on each side of the middle of the vein. In Gilpin, Clear Creek, Boulder and Summit counties it is 75 feet on each side of the vein. A certificate of location, containing names of locators and vein, date of location, number of feet claimed and general course of the vein, must be recorded with the county recorder in 3 months after the discovery of the lode. The claim must be located by sinking within 60 days, a discovery shaft or tunnel 10 or more feet deep, to show a defined crevice, by posting on the surface of the claim a notice of the name and date of finding of the lode, and name of locator, and by marking the surface boundaries by six squared posts at each corner

and in the middle of the sides. Lodes dipping beyond the sides of a claim are covered by the same, but if they dip beyond the vertical extensions of the ends they are not covered. Right of way is given, where opposition is made by condemnation, over other claims for ditches, tramways, pack trails, etc. A defective location may be relocated if no other rights have arisen. This requires a new shaft or tunnel, or an extension of the old one 10 feet deeper. But one location can be covered by a location certificate. Placer claims must be recorded, describing same by permanent monuments in same way as lode claims. Improvements must be made in the proportion of $100 to 160 acres of claim. Penalties are provided for destroying landmarks of claims, for buying stolen ore, etc. Where mines drain in common, either owner may drain after notice to the other to share expense. The washing of tailings from a sluice onto the claim of another is forbidden. Title under United States law is not affected by state laws.

DAKOTA.—Discoveries of lodes must be recorded within 20 days. Provisions and measurements for location same as in Colorado, except that 8 posts are required, one in the middle of each end. Discovery shaft must be dug within 30 days.

IDAHO.—Liens on mines for labor and material, good if filed within 60 days, or where work is done under a sub-contractor by notifying owner within 30 days, and filing within 40 days.

MONTANA.—Statement in accordance with United States law must be filed within 20 days after discovery, at the office of the county recorder, a vein with one defined wall having previously been discovered. Claims may be limited to 25 feet on each side of the middle of the lode, or may extend 300 feet on each side.

NEVADA.—Laws relate principally to recording and are unimportant. United States laws govern.

NEW MEXICO.—Record of locations must be made in 3 months after posting notice of claim. Vacant unsurveyed coal lands may be taken under United States statute.

GROUNDS FOR DIVORCE.

In addition to adultery and impotency—which are common grounds for divorce in pretty much all the states and territories—the following are the principal recognized causes, though others of a less general nature exist, including many discretionary with the courts.

ALABAMA.—Desertion two years; imprisonment two years, the sentence being seven years or more; crime against nature, drunkenness of husband before marriage, if concealed; pregnancy of wife at marriage, if unknown to the husband, and for cruelty of husband.

ARIZONA.—Desertion one year, cruelty, conviction of felony after marriage, habitual intemperance, fraud or forced consent of either party to the marriage.

ARKANSAS.—Desertion one year, cruelty, habitual drunkenness for one year, conviction of felony or infamous crime.

CALIFORNIA.—Desertion or neglect one year, cruelty, drunkenness one year, and conviction of felony.

COLORADO.—Desertion one year, want of support one year, husband being in good health, cruelty, drunkenness one year, conviction of infamous crime.

CONNECTICUT.—Willful desertion three years, or seven years' absence, drunkenness, cruelty, conviction of infamous crime.

DAKOTA.—Cruelty, desertion, drunkenness or neglect for one year; conviction for felony.

DELAWARE.—Desertion three years, drunkenness, cruelty, and conviction for felony, neglect to provide for support of wife for three years.

DISTRICT OF COLUMBIA. — Desertion three years, cruelty.

FLORIDA.—Desertion one year, cruelty and drunkenness. Applicant must have resided in state two years previous to application.

GEORGIA.—Desertion three years, imprisonment two years or longer, cruelty, drunkenness, pregnancy of wife at marriage if unknown to husband.

IDAHO.—Desertion one year, failure to provide two years, husband having ability—cruelty or drunkenness and conviction of felony, when the sentence is two years' imprisonment or more.

ILLINOIS.—Desertion or drunkenness for two years, cruelty, attempt on life, and conviction of infamous crime.

INDIANA.—Desertion two years, drunkenness, cruelty, failure to provide for family for two years, and conviction of infamous crime.

IOWA.—Desertion two years, cruelty, drunkenness, conviction of felony, pregnancy of wife at marriage by another than husband, unless husband has illegitimate child unknown to wife.

KANSAS.—Desertion one year, cruelty, drunkenness, neglect, conviction of felony, or pregnancy of wife by another.

KENTUCKY.—Desertion one year, cruelty, drunkenness, conviction of felony, loathsome disease, pregnancy of wife by another, and union with religious society requiring renunciation of marriage.

LOUISIANA.—Conviction of felony, and after one year after decree of separation for desertion, drunkenness, excess, cruelty and attempt on life.

MAINE.—Desertion three years, cruelty, or if the judge deems it reasonable and proper, conducive to domestic harmony consistent with the peace and morality of society.

MARYLAND.—Desertion three years and fonifircation of wife before marriage, separation for cruelty.

MASSACHUSETTS.—Desertion three years, drunkenness, cruelty, neglect to provide if able; uniting with religious society believing the marriage relation unlawful, and sentence to imprisonment for five years.

MICHIGAN.—Desertion two years, cruelty, neglect to provide if able, and sentence to imprisonment for three years.

MINNESOTA.—Desertion three years, cruelty, drunkenness one year, sentence to imprisonment, separation for neglect to provide.

MISSISSIPPI.—Desertion two years, cruelty, drunkenness, and sentence to penitentiary.

MISSOURI.—Desertion one year, cruelty, drunkenness, vagrancy of husband, conviction of infamous crime before or after marriage, pregnancy of wife at marriage without husband's knowledge.

NEBRASKA.—Desertion two years, cruelty, drunkenness, sentence to imprisonment for three years or more, failure of husband to provide.

NEVADA.—Desertion one year, cruelty, drunkenness, conviction of infamous crime, neglect to provide for one year if not unavoidable.

NEW HAMPSHIRE.—Desertion or absence three years, cruelty, drunkenness three years, sentence to imprisonment for one year or more, joining religious society believing marriage unlawful.

NEW JERSEY.—Desertion three years, separation for cruelty.

NEW MEXICO.—Desertion, cruelty.

NEW YORK.—Separation for desertion and cruelty; remarriage is not allowed the guilty party divorced for adultery.

NORTH CAROLINA.—Pregnancy of wife at marriage

without husband's knowledge; separation for desertion, cruelty and drunkenness.

OHIO.—Desertion three years, cruelty, drunkenness three years, imprisonment in penitentiary.

OREGON.—Desertion three years, cruelty, drunkenness two years, conviction of felony.

PENNSYLVANIA.—Desertion two years, cruelty, sentence for felony for two years.

RHODE ISLAND.—Desertion five years, or at discretion of court; cruelty, drunkenness, neglect to provide, and civil death.

SOUTH CAROLINA.—All laws permitting divorce for any cause are repealed.

TENNESSEE.—Desertion two years, drunkenness, attempt on life, conviction of infamous crime, pregnacy of wife at marriage without husband's knowledge.

TEXAS.—Desertion three years, cruelty, confinement in state prison after one year.

UTAH.—Desertion one year, cruelty, drunkenness, neglect to provide.

VERMONT.—Desertion three years, or absence seven years; cruelty, neglect to provide; sentence to three years or more in state prison.

VIRGINIA.—Desertion five years; conviction of infamous crime after or before marriage, if without knowledge of the other; prostitution, or pregnancy of wife before marriage without knowledge of husband; separation for desertion and cruelty.

WEST VIRGINIA.—Desertion three years; sentence to confinement in penitentiary before or after marriage; pregnancy or prostitution of wife before marriage without knowledge; separation for cruelty and drunkenness.

WISCONSIN.—Desertion one year, cruelty, drunkenness sentence to three years' imprisonment or more.

Desertion must be willful and continuing at the time of the petition for divorce. Cruelty must be extreme, or dangerous, or barbarous, or inhuman. Drunkenness must sometimes have been contracted after the marriage. Its sufficiency is weakened as a cause if not.

A divorce in one state is good in all others. The time that one must live in the state to be entitled to a divorce varies, though it is usually one year. Fraud vitiates divorces as everything else.

LAW OF PATENTS.

EVERY PERSON IS ENTITLED TO A PATENT who invents or discovers any new and useful device, art, process, manufacture, machine or composition of matter, or any new and useful re-arrangement of parts, or improvement or application thereof, or any new and original design for manufacture, for work in art, for printing upon fabrics, for painting, casting or to be worked into any manufacture, or any new and useful shape or configuration of any article of manufacture upon proper application and proceeding, and after payment of the fees established by law, provided the article, etc., patented has not been known or used by others in this country, or patented or described in any printed publication in any country before the invention or discovery thereof by the applicant, and provided the same has not been in public use or on sale for more than two years prior to the application for patent, unless proof of the abandonment of the same is made. Citizenship is not necessary to entitle an inventor to a patent.

THE APPLICATION must be made in writing in the English language to the Commissioner of Patents, and should comprise *petition, specifications, oath and drawings*, and when required *a model or specimen and the first fee of $15.* Until all the parts of the application, except the model or specimen, are received, it will not be put on file, and applications signed or sworn to in blank, or without actual inspection of the petition and specifications, or altered or partially filled up after being signed or sworn to, are stricken from the files if the irregularity is discovered before delivery of the patent. All applications for each year are numbered, and the applicant informed of the serial number of his complete application. The application must be complete for examination within two years after filing the petition, or it will be considered abandoned unless the delay be shown to be unavoidable. It is best to file all the parts of an application together. Where this is not done a letter should accompany each part setting forth its connection with the others.

THE PETITION is a written request to the Commissioner of Patents for a patent. It must be signed by the applicant and set forth his address and the name of his invention, and refer to the specification for full disclosures concerning the same.

THE SPECIFICATION is a written description of the invention or discovery, and the method of making, constructing, compounding and using the same. It must be full, clear, concise and exact, so that any one with skill in the art or science to which the invention pertains may create and use the same. It should set forth the name and residence of the applicant, the name, object and nature of the invention, a brief description of the drawings, indicating what each represents, a description in detail of the invention and the manner of constructing, practicing, operating or using it, the specific claims of the inventor as to what his invention is, his signature and the signatures of two witnesses, full names being given. All descriptions must be precise, and must refer to the different drawings when there are such by figures, and the various parts thereof by letters or figures, or both. When the claim is for improvement only the part to which the improvement relates must be designated, and the improvement explicitly distinguished from what is old. Drawings in such cases need only show so much as is necessary to an understanding of the application, operation, etc, of the specific improvement. In original applications the applicant must state under oath whether the invention has been patented to himself or others with his consent or knowledge in any country, and if so, the countries, date and number of each patent, and that it

has been patented in no other country than those given, and that it has not, according to his knowledge and belief, been in public use in the United States for more than two years prior to his application in this country. Two or more independent inventions cannot be claimed in one application, but when inventions depend upon each other and contribute mutually to a single result, they can be claimed in one application. When an inventor claims several inventions determined to be independent of each other, he must limit his specification of the pending application to one of them, and file separate applications on the others as in original applications. When two or more applications are made relating to the same subject matter of invention, all showing, but only one claiming, the same thing, those not claiming must contain disclaimers thereof, with reference to the application claiming it. All specifications must be clearly written on one side of paper with a wide margin to the left.

THE OATH must declare that the applicant verily believes himself to be the original inventor or discoverer of the article for which patent is sought; that he does not know or believe that the same has ever been used or known, and of what country he is a citizen or resident. In reissue cases the oath must declare the belief of the applicant that the original patent was invalid or inoperative because of defective or insufficient specifications, or of excessive claim regarding what is new, and that the error was the result of accident, mistake or inadvertence, and without fraudulent intent to deceive. Oaths by administrators, etc., are changed to meet the different case, but correspond in tenor. The oath may be made before anybody authorized by law to administer oaths. Where a claim not embraced in the original application is sought to be introduced, a supplemental oath on the same paper as the proposed amendment is required, setting forth that the said amendment was part of his invention, and invented before the filing of his original application.

THE DRAWINGS are required when the nature of the invention admits them. They must be signed by the inventor or his attorney and by two witnesses, and must exhibit every feature of the invention, and when connected with some previous device, its connection with or application thereto. Three sets of patent drawings are published, one 6x9½ inches for office use, certified copies, etc.; one a quarter the size for illustrating the volume sent to courts, and a small one for the Official Gazette. All drawings should be well executed, and must be on pure white paper of the thickness of three sheet Bristol board, with smooth surface, and drawn in India ink, and with pen only. The size of the sheets must be exactly 10x15 inches, and one inch from the edges a single marginal line must be drawn, and within these margins all signatures and drawings must be included. A space at the top of each page of not less than 1¼ inches must be left for the title, name, number and date. This top must be one of the shorter sides of the page. All lines must be clean, clear and solid, and not too fine or crowded. Surface shading should be open; sectional shading should be by oblique parallel lines about 1-20 inch apart. As few lines as possible should be used. Letters and figures of reference must be carefully formed, and should avoid mingling with the lines of the drawing and be of sufficient size to bear reduction to ⅛ their size. Drawings must be signed by the inventor at the lower right, and by witnesses at the lower left hand corner of the sheet. The title should be written in pencil on the back, and is inserted by the officials in uniform style. When drawings are so long as to require to go on the sheet lengthwise, the top is kept to the right with signatures at left. All views on a sheet must stand in the same direction. Drawings should be rolled, not folded, for sending to the office, and no stamp, advertisement or address will be permitted on the face of a drawing. Reissue applications must be accompanied by new drawings the same as in original applications, and the inventor's name must appear upon them when granted after

July 8, 1870, and the drawings must be upon the same scale as the original ones, or larger, unless otherwise especially authorized by the Commissioner. All lines of drawings must be black, and the scale must be large enough to show the mechanism without crowding. More than one sheet can be used when necessary, but this should be avoided. Drawings not well executed and in conformity with the foregoing will be returned to the applicant, or if he prefer, the department will make the proper corrections. The office will also make drawings, at cost, as rapidly as possible when so desired, when the applicant cannot otherwise conveniently get them.

MODELS are not required or admitted unless found to be necessary or useful by the primary examiner, and a written statement to that effect is filed by him. When required the examination is suspended till the model is furnished. Appeals can be made from the decision of the primary examiner to the Commissioner. The model should clearly exhibit every feature of the machine, but should include as little not pertinent to the invention as possible, unless a working model be desirable. It must be neatly made, substantial and durable, metal being the material preferred; but if the invention has essentially to do with a material, it must be of that material. It must not exceed a foot in any of its dimensions, except by especial permission. If made of wood, it must be painted or varnished, and glue must not be used, it being desired that the connection of the parts be capable of resisting heat and moisture. The name of the inventor should be permanently fixed on the model. Applications will not be examined where a model is necessary until a proper one is furnished. Unless for especial reasons, models are subject to the removal of the applicant when the application has been rejected more than two years, and upon the filing of a formal abandonment of an application, signed by the applicant in person, before two years have expired, the model may be returned. Models belonging to patented cases are permitted to leave the office only in charge of a sworn employe especially authorized by the Commissioner, with the written approval of the Secretary of the Interior. Models in contested cases may be returned to the applicants, and when not claimed in a reasonable time may be disposed of at the discretion of the claimant. Models not required are returned.

SPECIMENS.—When a patent is sought upon some form or composition of matter, specimens of it and its ingredients are required in sufficient quantity for experiment and preservation where not perishable.

EXAMINATIONS are made in regular order, all applications being classified. Inventions esteemed important to the public service may be taken up out of their order at the request of any head of department of the government.

REJECTIONS, ETC.—Applicants are notified of rejections, and the reasons for the same fully and exactly given, with such information and references as may enable him to judge of the advisability of further prosecuting his application, or of changing his specifications. If he persist with or without changing the specifications the case will be re-examined, and if again rejected, the reasons therefor will be again fully given. Notice of adverse decisions on preliminary or intermediate questions without rejection of any claim is also given to applicant with reasons, and if he dispute the propriety of such decision it will be reconsidered.

AMENDMENTS may be made before or after the first rejection, and as often as new reasons for rejection are offered. In case of such amendments the applicant must clearly show all patentable points which the invention presents in view of the references cited or objections made, and must point out how the amendments cover such objections or references. The right to amend is usually denied when such action has been taken on all claims as entitle the applicant to an appeal to the Board of Ex-

aminers in Chief. Good reasons for presenting subsequent amendments must be shown as well as reasons for not making them earlier. If consideration of them is refused, an appeal to the Commissioner may be made, the error of the Examiner being specifically pointed out. Amendments for inaccuracy and clerical faults may be made or required. Nothing not a part of the original invention can be covered by an amendment. The application once complete, the specifications will not be returned under any conditions, but copies will be furnished at a fixed charge.

DESIGNS are patentable by citizens or aliens, after proceedings as in inventions and payment of dues, for 3½, 7 or 14 years, as may be desired by the applicant. The specification must exhibit the name and residence of the applicant, name of design and article for which it is created, description of the design as it appears in the drawing, using letters and figures to indicate the parts, claims and signatures of inventor and two witnesses. A model may be required if a drawing or photograph does not sufficiently represent it. The drawings and photographs must conform to the requirements in the case of inventions, but where photographs are used, 10 extra copies must be furnished.

IF AN INVENTOR DIE, application may in all cases be made by his legal representatives, and patent will issue to them for the benefit of his estate.

IF AN INVENTOR BELIEVED in good faith, at the time of making application, that he was the originator of the article, compound, design or improvement, etc., he may receive a patent, even though, without his knowledge, the invention was or had been in use in foreign countries prior to his invention, provided it had not been patented or described in any printed publication.

JOINT INVENTORS receive joint patents; neither can obtain a separate one. Inventors of different parts of a device or different improvements therein cannot, when independent of each other, get a joint patent. If one party furnish the capital and another make the invention a joint application cannot be made, but the patent may issue to them jointly or to either if proper assignment be made.

PATENTS FROM FOREIGN GOVERNMENTS are not an obstacle to the acquirement of a patent by the inventor in the United States, unless the invention has been in public use in this country for more than two years prior to the application, but such patent will expire at the time the foreign patent, having the shortest life, expires. No patent will remain in force more than 17 years.

RE-ISSUE is granted to the holders of the original patent when the same is inoperative through defect of any kind arising from accidental or other causes, free from fraud or intention to deceive. In case of patents dated prior to July 8th, 1870, the application can be made by the assignees, but in patents junior to that date the application must be made and specification sworn to by the inventors, if living. The application must be accompanied by an abstract showing the complete chain of title, and if made by the inventor, when assigned, by a written consent from the owners; by a statement of defects or insufficiencies in the original specification which render the patent inoperative, and pointing out such claims as were in excess of the rights of the inventor; by a statement explanatory of how such errors came to be made and by an oath that the errors were not made with fraudulent intent. If the examiner declare the statement insufficient, an appeal lies to the Commissioner. New matter cannot be introduced into the re-issue specifications, nor can the model or drawings be amended except each by the other. When there is neither model or drawing, amendment may be made upon satisfactory proof that the matter offered was a part of the original invention and omitted by inadvertence, accident or error. Several patents may issue for separate parts of the device patented, if so requested by the patentee, a fee being charged for each. Each

division so made forms a subject of separate specification of the part or parts claimed therein, and the drawings or model should represent only such portion. Unless otherwise directed by the commissioner all such divisions of a re-issue issue at the same time, and delay or controversy in one will delay all. An original claim reproduced in the amended specification is subject to re-examination, and the application to revision and restriction as in original cases. The application for re-issue must be accompanied by a surrender of the original patent or an affidavit of its loss and a certified copy. If re-issue is denied the original will be returned. Any points which might have legitimately been claimed in the original patent, but were neglected without fraudulent intention, may be covered by a re-issue, but cannot be made the subject of a separate patent.

PRIORITY OF INVENTION between different claimants to an invention is determined by proceedings termed *interference*, and is not barred by the issue of a patent. It may arise between original applicants, original applicants and holders of patent in force, original applicants and applicants for re-issue, two or more applicants for re-issue, a re-issue applicant and unexpired patent and re-issue applicants of unexpired patents.

THE PATENT issues when on due examination it appears that the applicant is entitled to one. He is notified of the allowance prior to the issue, and must remit the final fee, when the patent will be delivered or mailed to him on date of issue or to his attorney, as the latter may direct, but to no one else unless especially requested. When the fee is paid and date and number given the case, a withdrawal is not permitted for any reason except fraud, a mistake on the part of the patent office, interference or illegality.

DATE, DURATION AND FORM OF PATENTS.—Patents bear date not later than 6 months after date of passing on application and allowance, if final fee is paid. On failure to pay in the time named the patent is withheld. Patents cannot be antedated. They contain a recital of the invention in brief, indicating its nature and purpose, and grant to the patentee and his legal representatives exclusive right to make, use and sell the invention in the United States and Territories for 17 years, or so long, if patented abroad, as the shortest of the foreign patents is in force, not to exceed 17 years. Design patents run 3½, 7 and 14 years as stated, a copy of specifications and drawings forms part of the patent.

CORRECTIONS in patents, of errors made by the Patent Office, will be made on due application, and if sufficient to warrant a reissue, such will be made. No charge is made for such corrections or re-issue, but mistakes made by the patentee, or not through any fault of the office unless forming grounds for a reissue, will not be corrected after delivery of patent.

PATENTS ABANDONED, FORFEITED, ETC.—Applications not completed for examination in 2 years after filing petition, or not prosecuted in proper manner in 2 years after notice of action, therein, or in regard to which a written declaration of abandonment has been filed, are held to be abandoned, and the same cannot be renewed unless the failure to prosecute be shown to have been unavoidable. If an abandoned application be renewed, new specifications, oath, fees and drawings are required, but the old model, if suitable, may be used. Failure to pay the final fee within the time fixed works a forfeiture of patent. When so forfeited any one interested may file a new application any time within 2 years.

DISCLAIMER in writing may be filed upon payment of the prescribed fee, whenever the original patentee has, by unintentional error, claimed more than he was entitled to, disclaiming such parts, and his patent is valid for what portion is justly his if such part is a material portion of the thing patented. Such disclaimer may be filed by any one interested in the patent, such interest being duly set forth therein, but pending actions are un-

affected by it. One witness is required, and the disclaimer must be recorded in the patent office. It must be distinguished from disclaimers filed in original or reissue applications, or to avoid prolonged interference cases.

CAVEATS are notices to the Patent Office of claims to invention to prevent the grant of a patent to another for the same invention upon application filed during the life of the caveat without proper notice to the filer of the same. A caveat may be filed by any inventor who is a citizen of the United States, or has been a resident for 1 year and swears to his intention to become a citizen, and wants time to perfect his invention, upon payment of the proper fee. The caveat sets forth the principle and purpose of the invention, and asks protection until the same shall be perfected. They are preserved in secret and are valid for 1 year from date of filing. It must cover only one invention, contain a specification and oath, and, if possible, a drawing, but the description need not be so precise as in an application for patent. The caveat may be renewed. If an application for a patent be filed by any other person during the life of the caveat for an invention interfering with that set forth in the caveat, and said application shall be found patentable before the expiration of the caveat, the application will be suspended, notice given the caveator and an interference granted, if the latter files a complete application within the prescribed time. The last named application must be filed within 3 months from the date indorsed on the notice afore-mentioned. No notice is given the caveator of actions pending at the time of filing the caveat, or of applications filed after it has expired. Caveats may be renewed from time to time, a new fee being paid each time. It gives no rights or protection except the notice of interfering applications. It is not assignable, although the invention covered is assignable; caveat papers cannot be removed from the office, but copies will be issued, for which a charge is made. All new matter requires a separate caveat.

ALIENATION of any patent or interest therein may be made in writing, and may cover all or any specified part of the Union. The rights accruing under a patent may be granted in writing to any person to make and use the invention in the United States, or any specified part thereof, or to grant the right in turn to others, and may exclude the patentee therefrom. A patent may be mortgaged in writing. License to use the patent may also be granted orally or in writing. An assignment, grant, conveyance or mortgage, unless recorded in the patent office within 3 months from date of execution, is void against subsequent purchasers, mortgagees, etc., for a valuable consideration. Instruments which amount to a license, mortgage, conveyance, assignment, grant or lien, or affect the title to the patent, may be recorded, and no others. Conditional assignments (recorded) are regarded as absolute until canceled by consent of both parties or the decree of a competent court. When it is desired that the patent shall issue to an assignee, the assignment must be recorded at the patent office not later than the date of payment of the final fee.

FEES are, as a rule, payable in advance upon application for each action. They are as follows:

On filing each application for design patent for 3½ years	$10 00
On issuing same no further charge.	
On filing each original application for design patent for seven years	15 00
On filing each original application for design patent for fourteen years	30 00
On filing each caveat	10 00
On filing each original application for patent	15 00
On filing each original application for invention or discovery	20 00
On filing a disclaimer	10 00

On filing each application for re-issue	$30 00
On filing each application for division of a reissue	30 00
On filing every application for extension of a patent	50 00
On the grant of every extension	50 00
On filing an appeal from a primary examiner to the examiners in chief	10 00
On filing appeal to the commissioners from examiners in chief	20 00
For certified copies of patents or other instruments, except copies of printed patents sold by the office for every 100 words	10
For certified copies of printed patents sold by the office, 10 cents for every 100 words, less the price actually paid for such copies without certification.	
For certified copies of drawings, the reasonable cost of making them.	
For recording an assignment of 300 words or less	1 00
For recording an assignment of more than 300 and not more than 1,000 words	2 00
For recording every assignment of more than 1,000 words	3 00
For uncertified copies of the specifications and accompanying drawings of all patents which are in print:	
Single copies	25
Twenty copies or more, whether of one or several patents, per copy	10
For uncertified copies of the specifications and drawings of patents not in print, the reasonable cost of making the same.	
For copies of matter in any foreign language, per 100 words, or fraction thereof	20
For translations, per 100 words, or fraction thereof	50
For assistance to attorneys and others in examination of records, one hour or less	50
Each additional hour, or fraction thereof	50
For assistance to attorneys in examination of patents and other works in the Scientific Library, one hour or less	1 00
Each additional hour, or fraction thereof	1 00

MISCELLANEOUS.—All business must be done in writing.

All letters must be addressed to the "Commissioner of Patents."

All charges on matter sent to the Patent Office must be prepaid or the same will not be received.

The personal presence of applicants at the Patent Office is unnecessary.

A separate letter should be written on each subject of inquiry or application.

Assignments for record, final fees and orders for copies or abstracts must each be in a separate letter.

Letters concerning applications should give name of applicant and invention, serial number and date of the application.

Letters relating to a patent should give name of patentee and article patented, and number and date of patent.

After patent is granted models, specifications are open to public inspection.

Any person of good moral character, duly empowered by power of attorney, may act as attorney, but a power of attorney executed to a firm must specify names, and the power must be filed at the Patent Office before the authority of the attorney will be recognized.

Orders for copies of assignments must give book and page of record and name of inventor, or an extra charge will be made.

No one is permitted to make copies or tracings from the files or records of the Patent Office.

The weekly issue of patents is made on Thursday, and the patents bear date on the 3d Tuesday thereafter.

All money sent is at the risk of the sender. Money paid by mistake, in excess, when not required, will be returned, but no

return will be made to those changing their intention and wishing to withdraw applications etc.

COPYRIGHTS may be obtained by any citizen or resident of the United States who is the author, inventor, designer or owner of any book, map, chart, dramatic or musical composition, engraving, cut, print (unless a trade-mark or label), photograph (or negative of same), painting, drawing, chromo, statuary, statue, or any model or design intended to be perfected as a work of art. The title or description *must* be deposited with the Librarian of Congress *before the publication of the work.* A copyright is granted for twenty-eight years, and may be renewed for fourteen years. It may be assigned, the assignment to be recorded in the Library of Congress. The fee to the government is $1.

TRADE-MARKS used in commerce with any foreign country, or with any Indian tribe, may be registered by the owner in the Patent Office for the period of thirty years, and are protected by the act of Congress of March 3, 1881. Trade-marks registered under prior unconstitutional acts may be re-registered without the payment of any additional Government fee. Trade-marks may be assigned, and the deed should be recorded in the Patent Office within sixty days after its execution. The Government fee is $25.

LABELS include any device, picture, word or words, figure or figures (not a trade-mark) applied to articles of manufacture to indicate the contents of a package, the name of the manufacturer or place of manufacture, the quality of the goods, directions for use, etc., and may be registered in the Patent Office. The term of the grant is for twenty-eight years. The Government fee is $6. If application is made for registration as a label when the application should be for a trade-mark, the registration will be refused and the fee paid lost.

APPLICATIONS FOR TRADE-MARK OR LABEL should give names, residence and place of business of the owners of the trade-mark or label (if owned by a company a statement that the same is or is not incorporated); a *fac-simile* of the mark or label; a statement of the class of merchandise to which it has been applied, and the particular description or kind of goods comprised in such class; a description of the particular manner in which the mark or label has been applied, whether direct to the article, or to wrappers or to packages or other vessels containing the article, and whether applied in colors or not. The owner of a mark or label is not confined to any particular manner of applying the mark or label, although it is necessary to state in what manner it has been usually applied and how long the mark or label has been used on the particular class of goods, and if used on goods in commerce with foreign nations or Indian tribes, with what nation or tribe it has been so used should be stated.

CANADIAN PATENTS may be taken out at any time within a year after issued here. Model is required and must not exceed one foot by eighteen inches in size. The term of the patent is five, ten or fifteen years, at the option of the applicant, and may be taken at first for a short term, and afterwards extended to the longer term. The Government fee for five years is $20; for ten years, $40; and for fifteen years, $60. The procedure and laws are much the same as in the United States.

PENSIONS.

PENSIONS ARE GRANTED to all soldiers and sailors disabled by wounds or disease incurred in the line of duty in the military or naval service of the United States. Where the soldier or sailor has died of such wounds or disease so contracted, his widow is entitled to a pension till she remarry. If she be dead or remarry, the pension goes to the children under 16 years old of the soldier or sailor. If there are neither widow nor children under 16 years old the deceased soldier's or sailor's mother, if dependent wholly or in part upon him for support, takes the pension, and when there are neither widow, children, nor mother, sisters under 16 years old dependent on the deceased are entitled to pension. Injuries or disease hereafter received in the service as stated also entitle to pension.

THE AMOUNT OF PENSION allowed is for total disability to officers, commissioned or non-commissioned, privates, musicians and marines as follows:

Lieutenant-Colonel or higher rank, per month	$30 00
Major, per month	25 00
Captain, per month	20 00
First-Lieutenant, per month	17 00
Second Lieutenant, per month	15 00
Non-commissioned officers, musicians and privates, per month	8 00

In the naval service the amount of pension allowed is as follows:

Captains, commanders, surgeons, paymasters and chief engineers, ranking by law with commander, lieutenants-commanding and masters-commanding, per month	$30 00
Lieutenants, surgeons, paymasters, chief engineers, ranking with lieutenant by law and passed assistant surgeons, per month	25 00
Professors of mathematics, masters, assistant-surgeons, assistant-paymasters and chaplains, per month	20 00
First assistant-engineers and pilots, per month	15 00
Passed midshipmen, captains and paymasters, clerks, second and third assistant-engineers, masters, mates, and all warrant officers, per month	10 00
Petty officers, seamen, etc., per month	8 00

INCREASE AND ARREARS of pensions are allowed and pensions are granted in cases of partial disability. Pensions are also granted to the Missouri militia.

BUT ONE FULL PENSION is allowed, and is the property of the person having precedent right in the order above stated. When it goes to children or sisters it must be equally divided between them.

PENSIONS BEGIN at the date of discharge from service in invalid cases, if application be made within a year thereafter, otherwise at the date of application. Pensions to widows, etc., begin with the death of the husband, etc.

PROOF OF RIGHT TO PENSION.—The declaration of the right of the claimant, including evidence of identity, must be sworn to before a court of record or some officer of such court having authority.

In support of the allegations in the claimant's declaration, testimony must be produced and the following rules observed:

1. The claimant's identity must be proved by two witnesses, certified by a judicial officer to be respectable and credible, who are present and witness the signature of the declarant, and who state, upon oath or affirmation, their belief, either from personal acquaintance or for other reasons given, that he or she is the identical person he or she represents himself or herself to be.

2. Every applicant for an invalid pension must, if in his power, produce the certificate of the captain, or of some other commissioned officer under whom he served, distinctly stating the time and place of the said applicant's having been wounded or otherwise disabled, and the nature of the disability; and that the said disability arose while he was in the service of the United States and in the line of his duty.

3. If it be impracticable to obtain such certificate, by the reason of the death or removal of said officers, it must be so stated under oath by the applicant, and his averment of the fact proved by persons of known respectability, who must state particularly all the knowledge they may possess in relation to such death or removal; then secondary evidence can be received. In such case the applicant must produce the testimony of at least two credible witnesses (who were in a condition to know the facts about which they testify), whose good character must be vouched for by a judicial officer, or by some one known to the department. The witnesses must give a minute narrative of the facts in relation to the matter, and must show how they obtained a knowledge of the facts to which they testify.

4. The usual certificate of disability for discharge should show the origin, character, and degree of the claimant's disability; but when that is wanting or defective, the applicant will be required to be examined by some surgeon regularly appointed, unless clearly impracticable.

5. The habits of the applicant, and his occupation since he left the service, should be shown by at least two credible witnesses.

If the applicant claims a pension as the widow of a deceased officer or soldier, she must prove the legality of her marriage, the death of her husband, and that she is still a widow. She must also furnish the names and ages of the decedent's children under 16 years of age at her husband's death, and the place of their residence. On remarriage her pension ceases, and the child or children of the deceased officer or soldier, if any be living, under the age of 16 years, are entitled to the same in her stead, from the date of such remarriage, on the requisite proof, under a new declaration. Proof of the marriage of the parents and of the age of claimants will be required in all applications in behalf of minor children. The legality of the marriage, in either case, may be ascertained by the certificate of the clergyman who performed the marriage ceremony, or by the testimony of respectable persons having knowldge of the fact, in default of record evidence, which last must always be furnished, or its absence shown. The ages and number of children may be ascertained by the deposition of the mother, accompanied by the testimony of respectable persons having knowledge of them, or by transcripts from the parish or town registers duly authenticated.

A mother, to be entitled to a pension, as having been wholly or partly dependent on a deceased officer or soldier, must prove that the latter contributed to her support for a certain period, showing specifically in what manner and to what extent.

If the claimant be a dependent sister, like proof will be required of the marriage of her parents and of her relationship to the deceased.

Guardians of minor claimants must, in all cases, produce evidence of their authority as such, under the seal of the court from which their appointment is obtained.

Applicants of the last four classes enumerated at the head of the chapter, who have in any manner aided or abetted the rebellion against the United States Government, are not entitled to the benefits of this act.

Invalid applicants who are minors may apply in their own behalf, without the intervention of a guardian.

Attorneys for claimants must have proper authority from those in whose behalf they appear. Powers of attorney must be signed in the presence of two witnesses and acknowledged before

a duly qualified officer, whose official character must be certified under seal.

In all cases the post-office address of the claimant must be distinctly stated, over his or her proper signature.

In filing additional evidence, correspondents should always give the number of the claim as well as the name of the claimant.

Pensions are also drawn by invalid soldiers of the war of 1812 and the Mexican war, and their unmarried widows, unless barred by acts construed as against the government in the war of 1861-1865.

ALL INFORMATION relative to pensions and the means of procuring them, together with a copy of the pension laws and all necessary blanks and directions for proceedings, are furnished free on application to the Commissioner of Pensions, at Washington, D. C., or to any pension agent.

POSTAL RATES AND RULES.

(NEW.)

DIRECTIONS FOR MAILING.—All mail matter must be directed to a postoffice, otherwise it will not be forwarded. Directions should be as full as possible. If name and address of sender is on the envelope or package, same will be returned if not delivered without passing through the Dead Letter Office.

FIRST CLASS MATTER includes letters and all matter partly or wholly in writing, sealed or unsealed, and all other matter sealed, or in any way fastened against easy inspection. The rate on this class of matter is 2 cents for each ounce or fraction of an ounce, and there is no limit to the weight of package which may be mailed.

SECOND CLASS MATTER includes newspapers and periodicals when sent by publisher or news-agents, and are mailable at 1 cent per pound or fraction thereof. They may be marked except by written or printed word without increase of postage. Newspapers and periodicals sent by persons other than the publisher or a news agent must be stamped at the rate of 1 cent for every four ounces or fraction thereof. No limit to weight.

THIRD CLASS MATTER includes printed matter in unsealed envelopes only (it is not sufficient that the envelope be notched, it must be unsealed), and is mailable at the rate of 1 cent for each two ounces or fraction thereof. This class includes books, circulars, chromos, engravings, music, hand-bills, proof sheets, lithographs, pamphlets, magazines, papers, manuscript (accompanying proof sheets), or any reproduction upon paper by any process but hand or type-writing not in the nature of personal correspondence. The weight cannot exceed 4 pounds, except the article mailed be a single book.

FOURTH CLASS MATTER includes all mailable matter not included in the above, so mailed as to be easily examined. It must be paid for at the rate of 1 cent per ounce or fraction of an ounce, and the weight of each package is limited to four pounds

POSTAL CARDS are first-class matter. They must not have anything written or printed on the address side except the directions, and must not have anything pasted or attached to them.

PERMISSIBLE WRITING.—On third and fourth class matter the following writing only is permitted: Name and address of sender preceded by the word "from," and list of articles contained in the cover, and a dedication or inscription on

the fly leaf or back of book or pamphlet. A passage may also be marked in a book, goods marked for identification, and the name of the one addressed or sender, with date, written in circular. Any other writing will be liable at letter rates, and to a fine of $10 for each offense. Printed matter inclosed with fourth class matter is subject to fourth class rates.

A SPECIAL STAMP of the value of 10 cents is issued, which, when attached to a letter, in addition to the lawful postage thereon, entitles the letter to immediate delivery at any place containing 4,000 population or over, according to the Federal census, within the carrier limit of any free-delivery office, or within one mile of the postoffice, or any other postoffice coming within the provisions of this law, which may, in like manner, be designated as a special delivery office. Such specially-stamped letters shall be delivered between 7 o'clock a. m. and midnight, and a book is provided in which the person to whom the letter is addressed shall acknowledge its receipt.

RATES TO CANADA are the same in all respects as in the United States, but merchandise is rigidly excluded, except samples of goods for sale to weight of 8 ounces charged for at 10 cents each.

RATES TO FOREIGN COUNTRIES in the Universal Postal Union 5 cents for each half ounce or fraction thereof for letters, and 2 cents for postal cards. Registration fee 10 cents. Printed matter and samples 1 cent for each 2 ounces or fraction thereof. Merchandise rigidly excluded. The Postal Union includes all considerable powers and many lesser ones, and others are joining constantly. Countries out of the Union have especial rates which will be given by any postmaster.

UNMAILABLE MATTER.—Obscene books, letters, papers, pictures and postal cards, lottery circulars and letters, liquids, gunpowder and other explosives, live reptiles, animals and insects (except queen bees), poisons, and any article liable to injure the mails or those handling them, are unmailable.

LETTERS REFORWARDED.—First-class matter will be forwarded from one office to another at the request of the one to whom it is addressed without charge. Other classes of matter have to be paid for again.

GENERAL INFORMATION.—Postmasters are not obliged to take mutilated money, or to take more than 25 cents in coppers or nickels. They are forbidden to give credit for stamps. Packages of mutilated currency may be registered to the Treasurer of the United States free. Money orders must be paid for in cash. Any other payment is forbidden under penalty. Spoiled postal cards are not redeemable by postmasters. Postoffice employes must not change an incorrect address, even though they know the right one.

POSTAL NOTES are issued at all money-order offices for sums less than $5, payable to bearer at any time within 3 months from the last day of the month of issue. The fee for a postal note is *three cents*. The person who presents a postal note for payment is required to receipt it. A postal note may also be repaid at the office of issue to the bearer at any time within three months from the last day of the month of issue. Lost or destroyed postal notes are not duplicated, and notes not paid in the time above specified are invalid, and a return of the money can only be secured by an application for a duplicate at the issuing office and the payment of a fee of 3 cents.

POSTAL MONEY ORDERS are issued for any amount up to $100, and offer security and convenience in the transmission of small sums. Safety is secured by leaving out of the order the name of the person for whom the money is intended. An advice or notification, containing full particulars of the order, is transmitted without delay by the issuing postmaster to the postmaster at the office of payment. The latter is thus furnished, before the order itself is presented, with information which will enable him to prevent its payment to any person not entitled thereto, pro-

vided *the remitter complies* with the regulation of the Department which prohibits him from sending the same information in a letter inclosed with his money-order. After once paying a money-order, by whomsoever presented, the post office department will not be liable to any further claim therefor. Under no circumstances can payment of an order be demanded on the day of its issue. The fees or charges for domestic money-orders is as follows:—

For orders not exceeding $10 ..... 8 cents.
For orders exceeding $10 and not exceeding $15 ..... 10 cents.
For orders exceeding $15 and not exceeding $30 ..... 15 cents.
For orders exceeding $30 and not exceeding $40 ..... 20 cents.
For orders exceeding $40 and not exceeding $50 ..... 25 cents.
For orders exceeding $50 and not exceeding $60 ..... 30 cents.
For orders exceeding $60 and not exceeding $70 ..... 35 cents.
For orders exceeding $70 and not exceeding $80 ..... 40 cents.
For orders exceeding $80 and not exceeding $100 ..... 45 cents.

When a larger sum than $100 is required, additional orders to make it up must be obtained. But postmasters are instructed to refuse to issue in one day, to the same remitter and in favor of the same payee, more than *three* money-orders payable at the same post office. Money orders may be indorsed directing payment to any person; and it is the duty of the postmaster upon whom the order is drawn to pay the amount thereof to the person thus designated, provided the postmaster is satisfied that such indorsement is genuine, and that the second party shall, if required, *prove his identity*, and shall give correct information as to the name and address of the person who originally obtained the order. More than one indorsement is prohibited by law, and will render and order invalid and not payable. The signature to the receipt on the face of the order should be that of the person who presents and receives payment of the same. Orders may be repaid by the issuing office within a year after issue. Lost orders on proper application and indemnity are duplicated if the original is unpaid and the latter then becomes invalid.

FOREIGN MONEY ORDERS—Money may be transmitted by postal order between the United States and Switzerland, Great Britain and Ireland, Germany, France, Italy, Canada and Newfoundland, Jamaica, New South Wales, Victoria, New Zealand, Queensland, the Cape Colony, the Windward Islands, Belgium, Portugal, Tasmania, and the Hawaiian Kingdom. The fees are:

For sums not exceeding $10 ..... 15 cents.
Over $10 and not exceeding $20 ..... 30 cents.
Over $20 and not exceeding $30 ..... 45 cents.
Over $30 and not exceeding $40 ..... 60 cents.
Over $40 and not exceeding $50 ..... 75 cents.

REGISTERED MATTER.—First, third and fourth class matter may be registered at all post offices on payment of a fee of 10 cents for each letter or parcel in addition to the postage, and the fee is the same whether the matter be addressed to domestic or foreign post offices. Registered letters are protected with great care, and delivered to the person to whom they are addressed, and a receipt from him returned to the sender. A receipt is also given by the postmaster at the time of registering.

THE GOVERNMENT OF THE UNITED STATES.

The government of the United States is formed of three distinct branches, the Legislative, Executive and Judicial.

THE LEGISLATIVE DEPARTMENT comprises the Senate and House of Representatives and makes all laws. Each state has two representatives in the Senate, elected for 6 years by the state legislatures. The number of congressmen from each state is governed by its population, but each state has at least one. They are elected for two years by the voters of the congressional districts into which the states are divided. One-third of the senators go out of office every two years. The pay of both senators and congressmen is $5,000 per year, with mileage (at 20 cents per mile) and other extras. The Speaker of the House gets $8,000. The Vice-President of the United States is President of the Senate, and receives $10,000 per year. Senators must be 32 years old, nine years citizens of the United States and live in the states they represent. A congressman must be 25 years old, seven years a citizen of the United States and live in the district he represents. Congress now comprises 76 senators and 325 representatives.

THE EXECUTIVE DEPARTMENT enforces the laws made. The executive power is vested in the President of the United States, who is elected for four years by electors chosen in each state by the voters thereof. The number of electors for each state is equal to the number of its congressmen, and United States senators, or two more than the number of its congressmen. The electors (now numbering in all 401) cast their ballots, the same are sealed, and opened by the President of the Senate in the presence of the two Houses of Congress. When two candidates receive the same number of electoral votes the election is thrown into the House of Representatives, which elects a president. The President must be born in the United States, have lived in the same for 14 years and be 35 years old. His pay is $50,000 per year. He is commander in chief of the army and navy, and appoints cabinet, judicial and executive officers, the appointments being confirmed by the Senate. The qualifications for Vice-President are the same as for President. The Cabinet comprises the Secretaries of State, Treasury, War, Navy and Interior, and the Postmaster and Attorney Generals, each of whom receives $8,000 per year.

THE JUDICIARY comprises, 1st: A Supreme Court setting at Washington, composed of a chief justice (salary $10,500 per year) and eight associate judges at $10,000 per year. They are appointed by the President, and hold office for life, unless removed for malfeasance. 2nd. Nine Circuit Courts, having jurisdiction over one or more states. 3d. Fifty-eight district courts. Appeals lie from the district to the circuit courts, and from the latter to the Supreme Court. 4th. Court of Claims, where suits against the United States must be brought.

THE STATES are governments within a government, and all powers not expressly granted to the general government remain in the states

THE TERRITORIES are governed by officers appointed by the President of the United States.

THE REVENUE of the United States is derived from custom and internal revenue taxes on liquors and tobacco, and the sale of land.

PAY OF UNITED STATES OFFICERS.

ARMY AND NAVY OFFICERS rank in the order given below and receive the salaries opposite each rank:

ARMY.		NAVY.	
General	$13,500	Admiral	$13,000
Lieutenant General	11,000	Vice Admiral	9,000
Major General	7,500	Rear Admiral	6,000
Brigadier General	5,500	Commodore	5,000
Colonel	3,500	Captain	4,500
Lietenant Colonel	3,000	Commander	3,500
Major	2,500	Lieutenant Commander	2,800
Captain	2,000	Lieutenant	2,400
Regimental Adjutant	1,800	Master	1,800
First Lieutenant	1,600	Ensign	1,200
Second Lieutenant	1,400	Midshipman	1,000

MINISTERS ABROAD receive pay as follows:

To England	$17,500	To Hawaiian Isles	$7,500
" Germany	17,500	" Belgium	7,500
" France	17,500	" Hayti	7,500
" Russia	17,500	" Columbia	7,500
" Austria	12,000	" Turkey	7,500
" China	12,000	" Venezuela	7,500
" Brazil	12,000	" Sweden	7,500
" Mexico	12,000	" Netherlands	7,500
" Italy	12,000	" Switzerland	5,000
" Japan	12,000	" Portugal	5,000
" Spain	12,000	" Bolivia	5,000
" Chili	10,000	" Denmark	5,000
" Peru	10,000	" Paraguay	5,000
" Central America	10,000	" Liberia	4,000
" Argentine Confed	7,500		

HEADS OF DEPARTMENTS are compensated as below:

Director Geolog. Surv'ys.	$6,000	Supt. Signal Service	$4 000
Supt. Coast Surveys	6,000	Commr. Land Office	4,000
Treasurer	6,000	Commr. Customs	4,000
Supt. Census	5,000	Commr. Pensions	3,600
Supt. Naval Observatory,	5,000	Commdr. Marine Corps	3,500
Supt. Bureau Engraver.	4,500	Commr. Agriculture	3,000
Public Printer	4,500	Commr. Indian Affairs	3,000
Director Mint	4,500	Commr. Education	3,000
Register Treasury	4,000		

POSTAL DEPARTMENT.—Three Assistant Postmaster Generals, $3,500 each: Chief Clerk, $2,200. Postmasters are paid as follows, except at New York, where salary is $8,000:

First Class	$3,000 to $4,000	Third Class	$1,000 to $2,000
Second Class	$2,000 to $3,000	Fourth Class	less than $1,000

Postmasters of the first, second and third classes are appointed by the President, all others by the Postmaster General.

U. S. ARMY RATION.—The following is a list of the Components of the *Army Ration* as established by existing law, the General Regulations, and the orders of the War Department, viz:

12 oz. of pork or bacon, or 20 oz. of fresh beef, or 22 oz. of salt beef.

Per 100 Rations.

18 oz. of soft bread or flour, or 16 oz. of hard-bread, or 20 oz. of corn-meal.
And,
15 lbs. of beans or peas, or 10 lbs. of rice or hominy.
10 lbs. of green coffee, or 8 lbs. of roasted (or roasted and ground) coffee, or 2 lbs. of tea.
15 lbs. of sugar.
4 quarts of vinegar.
1½ lbs. of adamantine or star candles.
4 lbs. of soap.
4 lbs. of salt.
4 oz. of pepper.
And to troops in the field, when necessary, 4 lbs. of yeast-powder to 100 rations of flour.

SUBSTITUTIVE ISSUES.—Fresh mutton may be issued in lieu of and at the same rate as fresh beef, when the cost of the former does not exceed that of the latter.

14 oz. of dried fish, or 18 oz. of pickled or fresh fish may be issued in lieu of the meat component of a ration.

Molasses or syrup may be issued in lieu of sugar at the rate of 2 gallons of molasses or syrup in lieu of 15 lbs. of sugar.

Three pints of liquid coffee to each man may be issued daily in lieu of sugar and coffee components to the ration to troops traveling upon cars or having no facilities for cooking coffee, the cost thereof not to exceed 21 cents per day.

The following issues may be made to troops traveling or in the field when it is impracticable to cook rations.

Per 100 Rations.

In lieu of the usual meat portion of the ration.	75 lbs. canned fresh beef, or 75 lbs. canned corned beef.
In lieu of the dry vegetable portion of the ration.	33 one-pound cans baked beans; or 20 two-pound cans baked beans; or 15 three-pound cans backed beans; or 5 one-gallon cans baked beans; or 25 pounds cheese.

Similar issues may be made when in the interest of economy or a supply of the articles is on hand in excess of the probable wants of troops traveling or in the field.

U. S. ENSIGNS AND FLAGS.—ENSIGN.—*Head or Hoist*—ten-nineteenths of its length. *Field.* Thirteen horizontal stripes of equal breadth, alternately red and white, beginning with red. *Union.* A blue field in the upper quarter, next the head, 4 of the length of the ensign and seven stripes in depth, with white stars, ranged in equidistant horizontal and vertical lines, equal in number to the number of states of the Union. JACK. Like the Union of an Ensign.

CUSTOMS OR REVENUE FLAG.—*Head* or *Hoist*—ten-sixteenths of its length. *Field.*—Sixteen perpendicular stripes, alternately red and white, beginning with red at the head. *Union.*—Composed of the Coat of Arms of the United States in dark blue on a white field, in the upper quarter next the head, eight-sixteenths of the length of the flag, or to the first edge of the fifth red stripe from the head, and extending down the head half way.

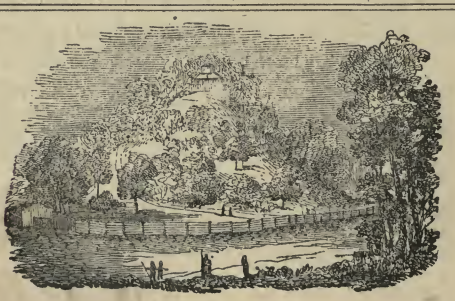
COINS OF THE UNITED STATES.

	WEIGHT.		WEIGHT.
Double Eagle=	$20, gold 516 grs.	Half Dollar.....silver	192.9 grs.
Eagle =	10, " 258 "	Quarter Doll.... "	96.45 "
Half Eagle =	5, " 129 "	Twenty Cents.. "	77.16 "
Quarter Eagle=	2½ " 64.5"	Dime..... "	38.58 "
Three Dollars.....	" 77.4"	Five Cents .cop'r-nick'l	77.16 "
One Dollar.....	" 25.8"	Three Cents "	30 "
Trade Dollar..... silver	420 "	One Cent..... bronze	48 "
One Dollar.....	" 412½"		

U. S. gold and silver coins are 9–10 fine. The coinage of the silver dollar of 412½ grains, the five and three-cent silver pieces, and the bronze two-cent pieces was discontinued under the Coinage Act of 1873. The act of February 28, 1878, again authorized the Coinage of the silver dollar of 412½ grains, and restored its legal tender character.

THE TOTAL AMOUNT OF MONEY circulating or otherwise held in the United States is estimated at $1,559,783,216, of which $346,681,016 is Legal Tender notes; $301,013,221 National Bank Notes. $579,377,878 gold and gold certificates, and $332,712,095 silver and silver certificates, fractional currency, etc.

Years.	Gold.	Silver.	Minor.
Prior to 1835.....	$15,780,160.00	$39,690,079.90	
1835 to 1852, incl...	221,011,460.00	39,523,292.00	$11,919,888.55
1852 to 1873, incl...	580,114,258.50	65,923,512.70	
1874.....	50,442,600.90	5,983,601.30	411,925.00
1875.....	33,553,965.00	10,070,368.00	230,375.00
1876.....	38,178,962.50	19,126,502.50	260,350.00
1877.....	44,078,199.00	28,549,935.00	62,125.00
1878.....	52,798,980.00	28,290,825.50	30,694.00
1879.....	40,986,912.27	27,227,882.50	97,798.00
1880	56,157,635.00	27,942,437.50	269,971.50
1881.....	78,733,864.00	27,657,009.75	405,119.95
1882.....	89,413,447.50	27,784,490.75	644,757.55
1883.....	35,936,927 50	28,836,470.15	1,423,307.16
1884.....	27,932,824.00	28,773,659.80	1,174,709.73
1885.....	24,861,123.50	28,848,959.65	527,556.80
1886.....	34,077,380.00	30,022,347.95	67,377.60
1887.....	22,393,297.00	34,666,483.75	943,650.65
Total.....	$1,446,451,825.50	$498,915,005.70	$18,424,659.74



INDIAN MOUND.

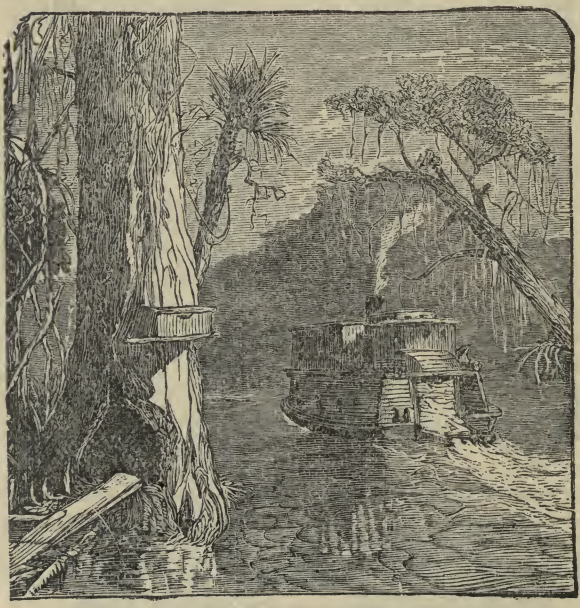
VALUE OF FOREIGN COIN IN U. S. MONEY.—The first section of the act of March 3, 1873, provides "that the value of foreign coin, as expressed in the money of account of the United States, shall be that of the pure metal of such coin of standard value," and that "the values of the standard coins in circulation of the various nations of the world shall be estimated annually by the Director of the Mint, and be proclaimed on the first day of January by the Secretary of the Treasury. The estimates of values contained in the following table are those made by the Director of the Mint, Jan. 1, 1885.

Country.	Monetary Unit.	Standard.	Value. D. C. M.
Argen. Rep	Peso fuerte	Double	0 95 5
Austria	Florin	Silver	0 35 9
Belgium	Franc	Gold and Silver	0 19 3
Bolivia	Boliviana	Silver	0 72 7
Brazil	Milreis of 1,000 reis	Gold	0 54 6
British Am	Dollar	Gold	1 0 0
Bogota	Peso	Gold	0 98 5
Central Am	Dollar	Silver	0 91 8
Chili	Peso	Double	0 91 2
Cuba	Peso	Double	0 93 2
Denmark	Crown	Gold	0 26 8
Ecuador	Sucre	Silver	0 72 7
Egypt	Pound of 100 piast's	Gold	4 94 3
France	Franc	Gold and Silver	0 19 3
Gt. Britain	Pound sterling	Gold	4 86 6½
Greece	Drachma	Gold and Silver	0 19 3
German E	Mark	Gold	0 23 8
India	Rup., 16 an	Silver	0 34 6
Italy	Lira	Gold and Silver	0 19 3
Japan	Yen	Gold	0 78 4
Liberia	Dollar	Gold	1 0 0
Mexico	Dollar	Silver	0 7 9
Netherlands	Florin	Double	0 40 2
Norway	Crown	Gold	0 26 8
Paraguay	Peso	Gold	1 0 0
Peru	Sol	Silver	0 72 7
Porto Rico	Peso	Gold	0 92 5
Portugal	Mil., 1,000 r's	Gold	1 0 8
Russia	R'bl., 100 co	Silver	0 58 2
Sandwich Islands	Dollar	Gold	1 0 0
Spain	Peseta of 100 c'ntim	Gold and Silver	0 19 3
Sweden	Crown	Gold	0 26 8
Switzerland	Franc	Gold and Silver	0 19 3
Tripoli	Mah., 20 pi's	Silver	0 65 6
Tunis	Pi's., 16 car	Silver	0 11 8
Turkey	Piaster	Gold	0 4 4
Columbia	Peso	Silver	0 72 7
Uruguay	Patacon	Gold	0 94 9

The above rates are the *true* or *commercial values*, proclaimed by the Secretary of the Treasury, and are taken at the custom houses in estimating the values of all foreign merchandise made out in any of said currencies. They should not be confounded with the *Mint values*.

LEGAL HOLIDAYS.—In all the states and territories of the United States the following are legal holidays: *Christmas* (Dec. 25th), *4th July*, and *Thanksgiving* (usually last Thursday in Nov.); *New Year's* is a legal holiday in all the states and territories ex-

cept Arkansas, Delaware, Georgia, Kentucky, Maine, Massachusetts, New Hampshire, North Carolina, South Carolina and Rhode Island. *Decoration Day* (May 30), is a legal holiday in Colorado, Maine, Vermont, Connecticut, Michigan, New Hampshire, New Jersey, Rhode Island, New York, Pennsylvania and District of Columbia. *Washington's Birthday* (Feb. 22) is a legal holiday in Alabama, Arkansas, Florida, Illinois, Iowa, Indiana, Kansas, Maine, Missouri, North Carolina, Ohio, Texas, Oregon and Tennessee. In Louisiana *Shrove Tuesday*, *Anniversary of Battle of New Orleans* (Jan. 8), *Lincoln's Birthday* (Feb. 12), *Firemen's Anniversary* (March 4,) and *Good Friday* are legal holidays. In Texas the *Anniversary of Texan Independence* (March 2,) and *Battle of San Jacinto* (April 21,) are legal holidays. In Georgia *Memorial Day* (April 26); in Mobile, Montgomery and Selma, Ala., *Shrove Tuesday*, and in Florida, Minnesota and Pennsylvania *Good Friday* are legal holidays. *General Election* days are ordered as holidays in California, Maine, Missouri, New Jersey, New York, Oregon, South Carolina and Wisconsin.



SILVER SPRINGS, FLORIDA.

PUBLIC DEBT OF THE UNITED STATES, in each year since 1790. (Official.)

1791	....	$75,463,476 52
1792	.....	77,227,924 66
1793	.....	80,352,634 04
1794	.....	78,427,404 77
1795	.....	80,747,587 38
1796	.....	83,762,172 07
1797	.....	82,064,479 33
1798	.....	79,228,529 12
1799	.....	78,408,669 77
1800	.....	82,976,294 35
1801	.....	83,038,050 80
1802	.....	80,712,632 25
1803	.....	77,054,686 30
1804	.....	86,427,120 88
1805	.....	82,312,150 50
1806	.....	75,723,270 66
1807	.....	69,218,398 64
1808	.....	65,196,317 97
1809	.....	57,023,192 09
1810	.....	53,173,217 52
1811	.....	48,005,587 76
1812	.....	45,209,737 90
1813	.....	55,962,827 57
1814	.....	81,487,846 24
1815	.....	99,833,660 15
1816	.....	127,334,933 74
1817	.....	123,491,965 16
1818	.....	103,466,633 83
1819	.....	95,529,648 28
1820	.....	94,015,566 15
1821	.....	89,987,427 66
1822	.....	93,546,676 98
1823	.....	90,875,877 27
1824	.....	90,269,777 77
1825	.....Jan. 1	83,788,432 71
1826	..... "	81,054,059 99
1827	..... "	73,987,357 20
1828	..... "	67,475,043 87
1829	..... "	58,421,413 67
1830	..... "	48,565,406 50
1831	..... "	39,123,191 68
1832	..... "	24,322,235 18
1833	..... "	7,001,032 88
1834	..... "	4,760,081 08
1835	..... "	351,289 05
1836	..... "	291,089 05
1837	..... "	1,878,223 55
1838	..... "	4,857,660 46
1839	.....Jan. 1	$11,983,737 53
1840	..... "	5,125,077 63
1841	..... "	6,737,398 00
1842	..... "	15,028,486 37
1843	.....July 1	27,203,450 69
1844	..... "	24,748,188 23
1845	..... "	17,093,794 80
1846	..... "	16,750,926 33
1847	..... "	38,956,623 38
1848	..... "	48,526,379 37
1849	.....Dec. 1	64,704,693 71
1850	..... "	64,228,238 37
1851	.....Nov. 30	62,560,395 26
1852	.....Dec. 20	65,131,692 13
1853	.....July 1	67,340,628 78
1854	..... "	47,242,206 05
1855	.....Nov. 17	39,969,731 05
1856	..... " 15	30,963,909 64
1857	.....July 1	29,060,386 90
1858	..... "	44,910,777 66
1859	..... "	58,754,699 33
1860	..... "	64,769,703 08
1861	..... "	90,867,828 68
1862	..... "	514,211,371 92
1863	..... "	1,098,793,181 37
1864	..... "	1,740,690,489 49
1865	..... "	2,682,593,026 53
1866	..... "	2,783,425,879 21
1867	..... "	2,692,199,215 12
1868	..... "	2,636,320,964 67
1869	..... "	2,489,002,480 58
1870	..... "	2,386,358,599 74
1871	.....Jan. 1	2,332,067,793 75
1872	..... "	2,243,838,411 14
1873	..... "	2,162,252,338 12
1874	..... "	2,159,315,326 17
1875	..... "	2,142,598,302 02
1876	..... "	2,119,832,195 27
1877	..... "	2,092,921,241 81
1878	..... "	2,045,955,442 79
1879	..... "	2,028,648,111 09
1880	..... "	2,011,798,504 87
1881	.....July 1	1,819,650,150 00
1882	..... "	1,675,023,474 00
1883	..... "	1,538,781,825 00
1884	..... "	1,438,542,995 00
1885	.....Jan. 1	1,418,548,371 00
1886	....July 1	1,290,521,525

In the last twenty amounts the cash in the Treasury is deducted from the aggregate debt, and bonds issued in aid of the Pacific Railroads are not included; these amounted, on the first day of January, 1887, to $107,870,475, including interest paid by the United States.

MASON AND DIXON'S LINE is a popular term used to signify the dividing line between the free and slave states. It originated from the fact that the line between Pennsylvania and Maryland and Virginia was surveyed by Charles Mason and Jeremiah Dixon. Its more general application is due to John Randolph, of Roanoke.

POPULAR AND ELECTORAL VOTE at all **Presidential Elections** since the Revolution are given in the following tables. Until 1804 each elector voted for two candidates for President; the one receiving the highest number of votes was elected President; and the next highest, Vice-President, provided he received a majority of the votes. New York, North Carolina and Rhode Island did not vote at the first election:

Year.	Party.	Candidates.	Vote.	
			Popular.	Electoral.
1789		George Washington		69
		John Adams		34
		John Jay		9
		R. H. Harrison		6
		John Rutledge		6
		John Hancock		4
		George Clinton		3
		Samuel Huntingdon		2
		John Milton		2
		James Armstrong		1
		Benjamin Lincoln		1
		Edward Telfair		1
		Vacancies		4
1792	Federalist	George Washington		132
	Federalist	John Adams		77
	Republican	George Clinton		50
		Thomas Jefferson		4
		Aaron Burr		1
		Vacancies		3
1796	Federalist	John Adams		71
	Republican	Thomas Jefferson		68
	Federalist	Thomas Pinckney		59
	Republican	Aaron Burr		30
		Samuel Adams		15
		Oliver Ellsworth		11
		George Clinton		7
		John Jay		5
		James Iredell		3
		George Washington		2
		John Henry		2
		S. Johnson		2
		Charles C. Pinckney		1
1800	Republican	Thomas Jefferson		73
	Republican	Aaron Burr		73
	Federalist	John Adams		65
	Federalist	Charles C. Pinckney		64
		John Jay		1
		The election being a tie, was thrown into Congress, and Jefferson chosen, with Burr as Vice.		
1804	Republican	Thomas Jefferson for P. George Clinton for V. P.		162
	Federalist	Chas. C. Pinckney for P. Rufus King for V. P.		14

Year.	Party.	Candidates.	Vote. Popular.	Vote. Elect.
1808	Republican	James Madison for P. / George Clinton for V. P.	.....	122
	Federalist.....	Chas. C. Pinckney for P / Rufus King for V. P.	.....	47
1812	Republican	James Madison for P. / Elbridge Gerry for V.P.	.....	131
	Federalist.....	De Witt Clinton for P / Jared Ingersoll for V. P.	.....	89
1816	Republican	James Monroe for P. / D. D. Tompkins for V.P.	.....	183
	Federalist.....	Rufus King for P. / John E. Howard for V.P. and Scattering.	.....	34
1820	Republican	James Monroe for P. / D. D. Tompkins for V.P.	.....	231
	Opposition.....	John Q. Adams for P. / Richard Stockton for V. P. and Scattering.	.....	8
1824	Republican.....	Andrew Jackson for P.	155,872	99
		Wm. H. Crawford for P.	44,282	41
		Henry Clay for P.	46,587	37
	Republican	John C. Calhoun for V.P.	.....	182
		Nathaniel Macon for "	.. ..	24
		Andrew Jackson for "	.....	13
		Martin Van Buren for "	.....	9
		Henry Clay for "	.....	2
	Coalition	John Q. Adams for P. / Nathan Sanford for V.P.	105,321	84 30
		Election thrown into House, and Adams chosen, with Calhoun as Vice.		
1828	Democratic.....	Andrew Jackson for P. / John C. Calhoun for V.P.	647,231	178
	Nat. Republic..	J. Q. Adams for P. / Richard Rush for V. P.	509,097	83
1832	Democratic.....	Andrew Jackson for P. / Martin Van Buren for V.P	687,502	219
	Nat. Rep.....	Henry Clay for P. / John Sargent for V. P.	530,189	49
	Independent ...	John Floyd for P. / Henry Lee for V. P.	.....	11
	Anti-Mason.....	William Wirt for P. / Amos Ellmaker for V. P	.....	7
1836	Democratic.....	Martin Van Buren for P. / R. M. Johnson for V. P.	761,549	170 147
	Whig.....	Wm. H. Harrison for P.	....	73
		Hugh L. White for P.	....	26
		Daniel Webster for P.	.. ....	14
		W. P. Mangum for P.	736,656	11
		Francis Granger for V. P.	.....	77
		John Tyler for V. P.	....	47
		William Smith for V. P.	.....	23

Year.	Party.	Candidates.	Vote. Popular.	Vote. Elect'l.
		Election of Vice-President thrown into Congress and Johnson chosen.		
1840	Whig.....	Wm. H. Harrison for P. / John Tyler for V. P.	1,275,017	234
	Democratic....	Martin Van Buren for P. / R. M Johnson for V. P. / S. W. Tazewell for V. P. / James K. Polk for V. P.	1,123,702	60 48 11 1
	Liberty	James G. Birney for P.....	7,059	....
1844	Democratic.....	James K. Polk for P. / George M. Dallas for V. P.	1,337,243	170
	Whig....	Henry Clay for P. / T. Frelinghuysen for V. P	1,299,068	105
	Liberty	James G. Birney for P.....	62,300	....
1848	Whig.....	Zachary Taylor for P. / Millard Fillmore for V. P.	1,360,101	163
	Democratic. ...	Lewis Cass for P. / Wm. O. Butler for V. P.	1,220,544	127
	Free Soil.....	Martin Van Buren for P. / Charles F. Adams for V. P	291,263	....
1852	Democratic	Franklin Pierce for P.... / Wm. R. King for V.P....	1,601,474	254
	Whig	Winfield Scott for P .... / Wm. A. Graham for V.P.	1,386,578	42
	Free Democ	John P. Hale for P ..... / Geo. W. Julian for V. P..	156,149	....
1856	Democratic....	James Buchanan for P.. / J.C.Breckenridge " V.P.	1,838,169	174
	Republican	John C. Fremont for P.. / Wm. L. Dayton for V. P.	1,341,264	114
	American.... ..	Millard Fillmore for P... / A. J. Donelson for V. P.	874,534	8
1860	Republican. .	A. Lincoln for P.... .... / Hanibal Hamlin for V. P.	1,866,352	180
	Democratic.....	J.C.Breckenridge for P.. / Joseph Lane for V. P ..	845,763	72
	Cons. Union....	John Bell for P..... / Edward Everett for V. P.	589,581	39
	Ind. Democrat.	Stephen A. Douglas for P. / H. V. Johnson for V. P..	1,375,157	12
1864	Republican	A. Lincoln for P..... / A. Johnson for V. P. ...	2,216,067	212
	Democratic.....	Geo. B. McClellan for P.. / G. H. Pendleton for V. P.	1,808,725	21
		Alabama, Arkansas, Florida, Georgia, Louisiana, Mississippi, North Carolina, Tennessee, Texas and Virginia, did not vote.		

Year.	Party.	Candidates.	Vote. Popular.	Vote. Elect'l.
1868	Republican.....	U. S. Grant for P..... S. Colfax for V. P. ..	3,015,071	214
	Democratic... .	Horatio Seymour for P.. F. P. Blair, Jr., for V. P.	2,709,613	80
		Mississippi, Texas and Virginia did not vote.		
1872	Republican.....	U. S. Grant for P .. .... H. Wilson for V. P.....	3,597,070	286
	Dem. and Liber.	Horace Greeley for P.... B. G. Brown for V. P...	2,834,079	47
		Vote of Georgia for Greeley, and of Arkansas and Louisiana for Grant rejected.		
	Democratic.....	Charles O'Connor for P.. G. W. Julian for V. P.	29,408	5
	Temperance....	J. Black for P..... A. H. Colquitt for V. P..	5,608	5
		Votes opposed to Grant scattered in Electoral College.		
1876	Republican	R. B. Hayes for P..... Wm. A. Wheeler for V.P.	4,033,950	185
	Democratic.....	S. J. Tilden for P..... T. A. Hendricks for V.P.	4,284,885	184
	Greenback.....	Peter Cooper for P..... C. Cary for V. P.....	81,740	....
	Prohibition.....	Green Clay Smith for P.. ————	9,522	
1880	Republican.....	James A. Garfield for P. C. A. Arthur for V. P...	4,449,053	214
	Democratic	W. S. Hancock for P.... W. H. English for V. P.	4,442,035	155
	Greenback.....	J. B. Weaver for P..... B. J. Chambers for V. P.	307,306	
1884	Democratic.....	S. G. Cleveland for P.... T. A. Hendricks for V. P.	4,833,319	219
	Republican.....	J. G. Blaine for P..... J. A. Logan for V. P....	4,844,061	182
	Greenback.....	B. F. Butler for P .... ————	208,553	....
	Prohibition.....	J P. St. John for P..... ————	150,335	....

PORTRAITS ON UNITED STATES CURRENCY AND POSTAGE STAMPS, and on legal tender (United States notes): $1, Washington; $2, Jefferson; $5, Jackson; $10, Webster; $20, Hamilton; $50, Franklin; $100, Lincoln; $500, Gen. Mansfield; $1,000, De Witt Clinton; $5,000, Madison; $10,000, Jackson. On silver certificates: $10, Robert Morris; $20, Commodore Decatur; $50, Edward Everett; $100, James Monroe; $500, Charles Sumner, and $1,000, W. L. Marcy. On gold notes: $20, Garfield; $50, Silas Wright; $100, Thomas H. Benton; $500, A. Lincoln; $1,000, Alexander Hamilton, $5,000, James Madison; $10,000, Andrew Jackson. On postage stamps: 10 cent, Jefferson; 6 cent, Lincoln; 5 cent, Garfield; 4 cent, Jackson; 2 cent, Washington; 1 cent, Franklin.

WARS OF THE UNITED STATES—COST AND NUMBER TROOPS:

	No. Troops.	*Cost.*
Revolution	395,364	$ 135,205,604
War of 1812	449,671	109,159,303
Mexican War	101,282	101,235,000
Civil War (Number Federal Troops)	2,859,132	6,189,929,908

UNION SOLDIERS LOST IN CIVIL WAR.—The following table shows the number of soldiers who lost their lives in the Union armies during the rebellion, and the general causes of their death. The figures are official:

	Officers.	*Men.*	*Aggregate.*
Killed or died of wounds	6,365	103,673	110,038
Died of disease	2,795	221,791	224,586
Drowned	106	4,838	4,944
Other accidental deaths	142	3,972	4,114
Murdered	37	587	624
Killed after capture	14	86	100
Committed suicide	26	365	391
Executed	..	267	267
Executed by enemy	4	60	64
Died from sunstroke	5	308	313
Other known causes	60	1,962	2,022
Causes not stated	28	12,093	12,121
Total	9,584	349,912	359,496

Number of deserters, 199,105; number taken prisoner, 212,842; number died in prison, 28,258.

NUMBER OF CONFEDERATES LOST.—Died of wounds or disease, 131,643; deserted, 94,362; killed in action, 49,482; taken prisoner (including final surrender of all armies at end of war), 476,169; died in prison, 26,774.

THE FIRST MONEY COINED by authority of the United States consisted of copper cents, which were issued in 1793. In 1794 silver dollars were coined, and in 1795 gold eagles. In 1835 branch mints were established at New Orleans, Charlotte, N. C., and at Dahlonega, Ga. Another was established at San Francisco in 1854, and another at Carson City, Nev., in 1870.

COAL FIELDS OF THE WORLD:

United States	200,266 square miles.
Europe	34,000 "
Great Britain	6,195 "
British America	2,200 "

PRODUCTS, EXPORTS AND IMPORTS.—The value of products, etc., of the United States are estimated as below:

Total value of products of industry ...	$10,000,000,000
Average annual coal production	78,161,744
Average annual value exports merchandise	791,633,259
Average annual value imports merchandise	622,589,714
Average annual value exports of cotton	12,322,428
Average annual value imports cotton ma'factures.	31,949,892
Total imports year ending June 30, 1885	577,476,085
" exports " " " " "	741,893,683
Exports of gold " " " " "	8,477,892
" silver " " " " "	33,753,633

AREA AMERICAN COAL FIELDS:

		Sq. miles.
Massachusetts } Rhode Island }	Anthracite	300
Pennsylvania	"	470
Oregon	"	100
Pennsylvania	Bituminous	12,656
Maryland	"	550
West Virginia	"	15,000
Virginia	"	225
North Carolina	"	45
Tennessee	"	3,700
Georgia	"	170
Alabama	"	4,300
Kentucky	"	13,700
Ohio	"	7,100
Indiana	"	6,700
Illinois	"	30,000
Michigan	"	13,000
Iowa	"	24,000
Missouri	"	21,000
Nebraska	"	4,000
Kansas	"	12,000
Arkansas	"	12,000
Indian Territory	"	10,000
Texas	"	3,000
Oregon	"	500
Washington Territory	"	750
West of Rocky Mountains	"	5,000
Total		200,266
To which may be added as recent formations Tertiary Coals, Lignites, etc., mostly near Rocky Mountains		200,000

THE NUMBER OF INDIANS in the United States is estimated at 360,000.

NICKNAMES OF CITIES of the United States are as follows: Baltimore; "Monumental City"; Boston, "Hub of the Universe," or "Modern Athens"; Brooklyn, "City of Churches"; Buffalo, "Queen City of the Lakes"; Chicago, "Garden City"; Cincinnati, "Queen City"; Cleveland, "Forest City"; Detroit, "City of the Straits"; Indianapolis, "Railroad City"; Kansas City, "City of Bluffs"; Keokuk, Ia., "Gate City"; Louisville, "Falls City"; Lowell, "City of Spindles"; Milwaukee, "Cream City"; Nashville, "City of Rocks"; New Haven, "City of Elms"; New Orleans, "Crescent City"; New York, "Empire City," or "Gotham"; Philadelphia, "City of Brotherly Love," or "Quaker City"; Pittsburgh, "Iron City"; Portland, Me., "Forest City"; Rochester, "Flour City"; Springfield, Ill., "Flower City"; St. Louis, "Mound City"; Washington, "City of Magnificent Distances."

DISTANCES FROM NEW YORK to various cities of the Union and other parts of the world, with the latest corrections, will be found below:

	Miles.
Adrian, Mich	775
Akron, Ohio	610
Albany, N. Y	143
Alexandria, Va	238
Algiers, La	1,556
Allegheny, Pa	434
Allentown, Pa	92
Alton, Ill	1,068
Annapolis, Md	222
Ann Arbor, Mich	716
Atchison, Kan	1,368
Atlanta, Ga	1,018
Auburn, N. Y	328
Augusta, Me	407
Augusta, Ga	887
Aurora, Ill	951
Baltimore, Md	188
Bangor, Me	482
Bath, Me	382
Baton Rouge, La	1,320
Belfast, Me	424
Bellefontaine, Ohio	658
Binghamton, N. Y	215
Blackstone, Mass	272
Bloomington, Ill	1,037
Boston, Mass	236
Bristol, R. I	215
Bucyrus, Ohio	632
Buffalo, N. Y	433
Burlington, N. J	74
Burlington, Iowa	1,122
Burlington, Vt	280
Cambridge, Mass	239
Camden, N. J	91
Canandaigua, N. Y	377
Carson City, Nevada	2,800
Chambersburg, Pa	246
Charleston, S. C	874
Charlestown, Mass	235
Chattanooga, Tenn	982
Chicago, Ill	911
Chillicothe, Ohio	645
Cincinnati, Ohio	754
Circleville, Ohio	640
Cleveland, Ohio	581
Columbia, S. C	744
Columbus, Ohio	624
Concord, N. H	308
Covington, Ky	755
Cumberland, Md	364
Davenport, Iowa	1,093
Dayton, Ohio	804
Denver City, Col	1,998
Des Moines, Iowa	1,251
Detroit, Mich	679
Dover, N. H	304
Dubuque, Iowa	1,100
Dunkirk, N. Y	460
Elmira, N. Y	274
Erie, Pa	508
Evansville, Ind	1,026
Fall River, Mass	180
Fitchburg, Mass	218
Fort Kearney, Neb	1,598
Fort Wayne, Ind	763
Fredericksburg, Va	296
Galena, Ill	1,083
Galesburg, Ill	1,076
Galveston, Tex	1,900
Georgetown, D. C	228
Hamilton, Ohio	766
Harrisburg, Pa	182
Hartford, Conn	112
Hudson, N. Y	115
Indianapolis, Ind	838
Jackson, Miss	1,498
Jefferson City, Mo	1,210
Kalamazoo, Mich	822
Kansas City, Mo	1,367
Kingstown, N. Y	88
Lafayette, Ind	903
Lansing, Mich	785
Lawrence, Mass	262
Leavenworth, Kan	1,388
Lexington, Ky	841
Lexington, Mo	1,354
Little Rock, Ark	1,430
Lockport, N. Y	507
Louisville, Ky	904
Lowell, Mass	261
Lynchburg, Va	404
Macon, Ga	1,121
Madison, Wis	1,049
Memphis, Tenn	1,289
Milledgeville, Ga	1,110
Milwaukee, Wis	996
Mobile, Ala	1,370
Montgomery, Ala	1,193
Montpelier, Vt	454
Nashua, N. H	275
Nashville, Tenn	1,088
New Albany, Ind	907
New Bedford, Mass	181
New Brunswick, N. J	32
Newburgh, N. Y	53
New Haven, Conn	76
New Orleans, La	1,550
Newport, Ky	744
Newport, R. I	102
Norwalk, Conn	45
Omaha, Neb	1,455
Oswego, N. Y	237
Philadelphia	89
Pittsburg, Pa	445
Pittsfield, Mass	161
Portland, Me	341
Poughkeepsie, N. Y	76
Providence, R. I	189
Richmond, Va	343
Rochester, N. Y	374
Sacramento, Cal	3,183
St. Louis, Mo	1,066
St. Paul, Minn	1,322
Salt Lake City, Utah	2,476

	Miles.		Miles.
San Antonio, Tex	1,952	Trenton, N. J	58
San Francisco, Cal	3,273	Troy, N. Y.	151
Savannah, Ga	913	Utica, N. Y	240
Springfield, Ill	1,032	Vicksburg, Miss	1,287
Springfield, Mass	139	Washington, D. C	228
Syracuse, N. Y	293	Wheeling, W. Va	511
Terre Haute, Ind	899	Wilmington, Del	118
Toledo, O	706	Worcester, Mass	193

BY WATER.

Place.	Country.	Miles.
Alexandria	Egypt	5,095
Amsterdam	Holland	3,530
Bermudas	West Indies	680
Bombay	India	11,575
Bordeaux	France	3,334
Brussels	Belgium	3,418
Cape of Good Hope	Africa	6,840
Cape Horn	South America	7,000
Constantinople	Turkey	5,156
Copenhagen	Denmark	3,650
Calcutta	India	12,510
Canton	China	14,115
Gibralter	Spain	3,290
Glasgow	Scotland	2,934
Halifax	Nova Scotia	563
Havana	Cuba	1,275
Lima	Peru	11,312
Lisbon	Portugal	3,184
London	England	3,376
Liverpool	England	3,080
Madras	British India	11,864
Naples	Italy	4,327
Pekin	China	15,325
Pernambuco	Brazil	4,926
St. John	Newfoundland	786
St. Petersburg	Russia	4,437
Honolulu	Sandwich Islands	7,159
San Francisco	California	18,843
Shanghai	China	14,510
Stockholm	Sweden	4,075
Valparaiso	Chili	4,813
Vera Cruz	Mexico	2,185
Vienna	Austria	4,095
Yokohama	Japan	7,529

THE INTERNAL REVENUE RECEIPTS for 1886 were $116,902,869, and were distributed about as follows: Alabama, $81,038; Arizona, $2,750; Arkansas, $94,893; California, $2,090,785; Colorado, $201,482; Connecticut, $461,972; Dakota, $10,000; Delaware, $200,000; Florida, $237,272; Georgia, $304,384; Idaho, 2,500; Illinois, $23,852,253,000; Indiana, $4,873,230; Iowa, $2,547,341; Kansas, $204,146; Kentucky, $15,746,941; Lonisiana, $552,115; Maine, $57,801; Maryland, $2,462,092; Massachusetts, $2,292,679; Michigan, $1,671,994; Minnesota, $534,532; Mississippi, 50,000; Missouri, $7,060,652; Montana, $90,840; Nebraska, $1,674,013; Nevada, $57,000; New Hampshire, $375,000; New Jersey, $3,951,676; North Carolina, $1,744,959; New Mexico, $65,124; Ohio, $12,921,349; New York, $14,365,209; Oregon, $124,034; Pennsylvania, $7,847,231; Rhode Island, $132,080; South Carolina, $100,014; Tennessee, $1,024,913; Texas, $196,851; Vermont, $32,503; Virginia, $2,982,728; West Virginia, $486,063; Wisconsin, $309,317.

DISTANCES FROM WASHINGTON to various points in an air line:

	Miles.
Alexandria, Egypt	5,275
Amsterdam, Holland	3,555
Athens, Greece	5,005
Aukland, N. Z.	8,290
Algiers, Algeria	3,425
Berlin, Prussia	3,847
Berne, Switzerland	3,730
Brussels, Belgium	3,5 5
Batavia, Java	11,118
Bombay, Hindostan	8,548
Buenos Ayres, A. C.	5,013
Bremen, Pr.	3,500
Constantinople, Turkey	4,880
Copenhagen, Denmark	3,895
Calcutta, Hindostan	9,348
Canton, China	9,000
Cairo, Egypt	5,848
Cape Town, Cape Colony	6,684
Cape of Good Hope	7,380
Caraccas, Venezuela	1,058
Charlotte Town, P. E. I.	820
Dublin, Ireland	3,076
Delhi, Hindostan	8,368
Edinburgh, Scotland	3,275
Frederickton, N. B.	670
Gibraltar, Spain	3,150
Glasgow, Scotland	3,215
Halifax, N. S.	780
Hamburg, Germany	3,570
Havana, Cuba	1,139
Honolulu, S. I.	4,513
Jerusalem, Palestine	5,495
Jamestown, St. Helena	7,150
Lima, Peru	3,515
Lisbon, Portugal	3,190
Liverpool, England	3,228
London, England	3,315
City of Mexico, Mex.	1,867
Montevideo, Uruguay	5,003
Montreal, Canada	471
Madrid, Spain	3,485
Moscow, Russia	4,466
Manilla, Phil. Islands	9,360
Mecca, Arabia	6,598
Muscat, Arabia	7,600
Monrovia, Liberia	3,645
Morocco, Morocco	3,305
Mourzouk, Fezzan	5,525
Mozambique, Moz.	7,348
Ottawa, Canada	462
Panama, New Granada	1,825
Parana, A. C.	4,733
Port au Prince, Hayti	1,425
Paris, France	3,485
Pekin, China	8,783
Quebec, Canada	601
Quito, Ecuador	2,531
Rio Janeiro, Brazil	4,280
Rome, Italy	4,365
St. Petersburg, Russia	4,296
Stockholm, Sweden	4,055
Shanghai, China	8,600
Singapore, Malay	11,300
St. Johns, N. F.	1,340
San Domingo, S. D.	4,300
San Juan, Nicaragua	1,740
San Salvador, A. C.	1,650
Santiago, Chili	4,970
Spanish Town, Jamaica	1,446
Sidney, C. B. I.	975
Sydney, Australia	8,963
St. Paul de Loanda	5,578
Timbuctoo, Soudan	3,395
Tripoli, Tripoli	4,425
Tunis, Tunis	4,240
Toronto, Canada	343
Venice, Italy	3,835
Vienna, Austria	4,115
Valparaiso, Chili	4,934
Vera Cruz, Mexico	1,680
Warsaw, Poland	4,010
Yeddo, Japan	7,630
Zanzibar, Zanzibar	7,078

THE MORTALITY OF CITIES in the United States is as follows, the number following each city indicating the number of deaths per year to the 1,000 of population: New York, 25; Philadelphia, 20; Chicago, 20; St. Louis, 19; Baltimore, 20; Cincinnati, 19; Louisville, 24; San Francisco, 20; Atlanta, 19; Washington, 23; Pittsburgh, 20; New Orleans, 23; Brooklyn, 22; Boston, 22; Savannah, 24; Charleston, 24; New Haven, 18; Salt Lake City, 20; Providence, 19; Memphis, 24; Jacksonville, 24; Richmond, 19; Cleveland, 18; Newark, 21; Milwaukee, 19; Mobile, 23; Nashville, 22; St. Paul, 25; Minneapolis, 25.

EXPENDITURES IN THE UNITED STATES are approximately as follows: For liquor, $930,000,000; for bread, $525,060,000; for meat, $312,000,000; for iron and other metals, $365,000,000; for woolen goods, $224,000,000; for cotton goods, $198,000,000; for lumber, $235,000,000; for boots and shoes, $197,000,000; for sugar and molasses, $55,000,000; for educational purposes, $96,00 ,000.

THE ORIGIN OF THE DOLLAR dates from July 6, 1785, prior to which the English pound was used in the colonies. The weight was fixed in August of the following year, and was based on that of the old Spanish dollar. The first dollar ever issued by any government was coined at Joachimsthall, in Bohemia.

IMMIGRATION TO THE UNITED STATES, 1820-1884.

Previous to 1820 no record of immigrants was kept, but the whole number landed from the close of the Revolution to that date, is put at about 270,000.

Year.	Immigrants.	Year.	Immigrants.	Year.	Immigrants.	Year.	Immigrants.
1820	8,385	1837	79,340	1854	427,833	1871	321,350
1821	9,127	1838	38,914	1855	200,877	1872	404,806
1822	6,911	1839	68,069	1856	195,857	1873	459,803
1823	6,354	1840	84,066	1857	246,945	1874	313,339
1824	7,912	1841	80,289	1858	119,501	1875	227,408
1825	10,199	1842	104,565	1859	118,615	1876	169,986
1826	10,837	1843	52,496	1860	150,237	1877	141,857
1827	18,875	1844	78,615	1861	89,724	1878	138,469
1828	27,382	1845	114,371	1862	89,007	1879	177,826
1829	22,520	1846	154,416	1863	174,524	1880	457,257
1830	23,322	1847	234,968	1864	193,195	1881	669,431
1831	22,633	1848	226,527	1865	247,453	1882	788,992
1832	60,482	1849	297,024	1866	167,757	1883	603,322
1833	58,640	1850	369,980	1867	298,967	1884	518,592
1834	65,365	1851	379,466	1868	282,189	1885	395,346
1835	45,374	1852	371,603	1869	352,768	1886	334,203
1836	76,242	1853	368,645	1870	387,203	Total	13,448,657

NATIONALITY OF IMMIGRANTS TO THE UNITED STATES.—Up to 1884 the countries named each contributed immigrants as follows:

England	946,872	Greece	712
Ireland	216,876	Italy	79,673
Scotland	168,113	Netherland	48,428
Wales	21,643	Poland	19,218
Great Britain, not specified	564,914	Portugal	11,104
Austria-Hungary	72,492	Russia	41,213
Belgium	25,671	Spain	29,694
Denmark	51,605	Sweden and Norway	698,114
France	344,716	Switzerland	89,807
Germany	3,509,128	Turkey	1,108
China	274,381	Total	8,915,502

NATURAL WONDERS OF THE UNITED STATES.—*Yosemite Valley*, California, 57 miles from Coulterville. A valley from 8 to ten miles long, and about one mile wide. Has very steep slopes about 3,500 ft. high; has a perpendicular precipice 3,089 ft. high; a rock almost perpendicular, 3,270 ft. high; and waterfalls from 700 to 1,000. *Niagara Falls*—A sheet of water three-quarters of a mile wide, with a fall of 175 ft. *Natural Bridge* over Cedar Creek in Virginia; *Mammoth Cave* in Kentucky; *Yellowstone National Park* in Montana; *Peaks of Otter* in Virginia; *Grand Menans Land* in Maine; *Mount Desert* in Maine; the *Palisades of the Hudson river*; *Great Salt Lake* in Utah; *Hot Springs* in Arkansas; the *Royal Gorge*, the *Mount of the Holy Cross*, the *Garden of the Gods* in Colorado.

CHURCH MEMBERSHIP IN THE UNITED STATES.

(Official.)

Denominations.	Churches.	Ministers.	Members.	Denominations.	Churches.	Ministers.	Members.
Advent. 2d..	800	600	70 000	Meth. Free...	107	260	12,318
Adv 7th Day	640	114	15,570	Meth. Cong...	200	225	13,750
Baptist	26,060	16,596	2,296,327	Meth. Prim...	14	52	3,369
Bap. Anti-M.	900	400	40,000	Meth. Prot...	573	1,385	135,000
" Free Will.	1,432	1,213	78,012	Meth. Welsh Calvinistic..	1,134	600	118,979
" 7th Day..	94	110	8,539	Meth. Wesley.	148	400	17,087
" Six Prin.	20	12	2,000	Moravian.....	84	94	9,491
Christian ...	5,100	3,782	591,821	Mormon	654	3,906	110,377
Congreg'n'l.	3,604	3,713	381,697				
Dunkards Brethren .	250	200	100,000	New Jerus'lm (Swed'brgn)	93	89	3,994
Epis. Prot..	3,000	3,432	338,383	Presbyterian .	5,858	5,218	600,695
Epis. Ref...	....	100	9,448	Presb. (South)	2,010	1,081	123,806
Evang. Ass.	1,576	1,545	117,027	" Cum'bl'd	2,457	1,386	111,863
Friends.....	392	200	60,000	Presb. Ref....	167	143	17,273
Jews.....	260	202	13,633	Presb. United	826	719	84,573
Lutheran...	5,553	3,132	950,868	Ref'd. Church (Dutch).....	509	545	80,167
Mennonite..	300	350	50,000	Ref. Church..	1,405	748	155,857
Method. Ep.	17,935	24,658	1,724,420	Rom. Catholic	6,241	6,546	6,901,324
Method. Ep. (South) ...	4,942	11,703	860,687	Shaker.....	18	68	2,400
Method. Ep. African..	381	1,738	387,566	Unitar'n Congregational.	335	394	17,960
Method. Ep. Afr. Zion.	629	1,800	300,000	United Breth. in Christ....	4,524	2,196	157,835
Method. Ep. Colored...	388	638	112,938	Universalist ..	956	729	27,429
				Winebren'r's.	400	350	30,000

THE GREAT CANALS OF THE WORLD.—The Imperial Canal of China is over 1,000 miles long. In the year of 1861 was completed the greatest undertaking of the kind on the European continent, the Canal of Langedoc, or the Canal du Midi, to connect the Atlantic with the Mediterranean; its length is 148 miles, it has more than 100 locks and about 50 aqueducts, and its highest part is no less than 600 feet above the sea; it is navigable for vessels of upward of 600 tons. The largest ship canal in Europe is the great North Holland Canal, completed in 1825—125 feet wide at the water surface, 31 feet wide at the bottom, and has a depth of 20 feet; it extends from Amsterdam to the Helder, 51 miles. The Caledonia Canal, in Scotland, has a total length of 60 miles, including three lakes. The Suez Canal is 88 miles long, of which 66 miles are actual canal. The Erie Canal is 350½ miles long; the Ohio Canal, Cleveland to Portsmouth, 332; the Miami and Erie, Cincinnati to Toledo, 291, the Wabash and Erie (abandoned) Evansville to the Ohio line, 374.

HEIGHT OF GREAT MOUNTAIN PEAKS.—Pike's Peak, N. A., 14,000 ft.; Mt. Cervin, Europe, 14,835 ft.; Mt. Iztaccihuatl, N. A., 15,705 ft.; Mt. Kasbek, Europe, 16,500 ft. Mt. St. Elias, N. A., 17,850 ft.; Mt. Chimborazo, S. A., 21,422 ft.; Mt. Chumulari, Asia, 23,946 ft.; Mt. Kintchinjunga, Asia, 28,178 ft.; Mt. Everest, Asia, 29,002 ft.; Mt. Dhawalagheri, Asia, 28,826 ft.; Mt. Aconcagua, S. A., 22,422 ft.; Mt. Elbruz, Europe, 18,514 ft.;

Popocatapetl Vol., N A.. 17,540 ft.; Mt. Blanc, Europe, 15,732 ft.; Mt. Rosa, Europe, 15,150 ft.; Mt. Fairweather N. A., 24,500 ft.; Mt. LeGeant, Europe, 13,800 ft.

WINTER IN THE SOUTH.

THE FIRST IRON FURNACE in America was at Falling Creek, a few miles below Richmond, Va., but on the opposite side of the James. The works were begun in 1619, but in 1622 were destroyed in an Indian massacre. They were never renewed, and the next attempt to manufacture iron was made by Gov. Spottswood, near the present site of Fredericksburg, about 1726. To this the plantation of George Washington's father, Augustine, contributed much ore.

THE

NATIONS OF THE WORLD,

Their Areas, Populations, Characteristics, Governments and Rulers.

ARGENTINE REPUBLIC.—Area, 1,619,500 sq. miles; pop., about 3,000,000; abounds in fertile plains, called pampas, with rich alluvial soil four or five feet thick, formed by decay of vegetation; consists of 14 provinces; Buenos Ayres is the most important, pop. 500,000; capital city, Buenos Ayres, 200,000 pop.; country sparsely populated. Population of Buenos Ayres largely European, and immigration has increased enormously of late years. Eminently a pastoral country, with about 18,000,000 cattle, 140,000,000 sheep; exports largely wool, hides and tallow. Twelve lines of steamers run to Europe, the passage occupying 29 days; miles of railway, 1,800; telegraph, 8,000; Atlantic cable communicates with London. Revenue, 1883, $31,236,749, derived from import and export duties; expenditure, $32,694,490; national debt, $134,672,500. The government is a federal republic, modeled on the constitution of the United States, except that the ministry is responsible to Congress. The laws are the same for all, native or foreign; immigrants may naturalize or maintain their foreign nationality. National Congress consists of a Senate and House of Deputies; the executive power is entirely in the hands of the president, who is held responsible for the acts of that department. The president, Gen. Julio. A. Roca, was elected 1880 for seven years, with a salary of $20,000.

AUSTRIA.—Empire, called since 1867 Austro-Hungary; area, 240,000 sq. miles; pop., 1880, 37,741,413; comprises five countries, each bearing the name of kingdom; largest city and capital, Vienna, pop., 1880, 726,105. Population embraces several distinct races, the most numerous being the German, numbering 9,000,000; Slavic races, 16,500,000—Poles, Croats, Servians, Czechs, Moravians, etc.; Magyars, or Hungarians, 5,500,000; Wallachians, 3,000,000; Jews, 1,100,000; Italians, 515,000; Gypsies, 140,000. Two-thirds of people Roman Catholics. Education compulsory on all children from 6 to 12; there are 92 gymnasia, or higher schools, and 6 universities, while Hungary has 142 gymnasia and one university. Agriculture chief pursuit; about 30% engaged in trade or manufactures. The productive land of Austria is estimated at 89% of its area; Hungary, 84%. The great crop is grain, annual yield of over 400,000,000 bushels. Principal sea-port, Trieste, on the Adriatic. Total imports, 1882, $336,000,000; exports, $376,000,000. The legislative body, or Reichsrath, consists of a House of Lords nominated by the emperor, consisting partly of life members and partly of hereditary nobles; and a House of Representatives, 353 members, elected by all citizens who possess a small property qualification. Hungary has a Reichstag, consisting of a House of Magnates for high officers and peers of the kingdom, and a House of Representatives elected for three years. The sovereign (the Austro-Hungarian emperor) is styled king in Hungary. Austria pays 70% and Hungary 30% toward the expenses of the empire. The budget of 1883 summed up: receipts, $380,000,000; expenditures about the same; public debt of empire, $1,097,978,118. The army, on a

peace footing, consisted in 1883 of 284,071 men and 16,635 officers; military service compulsory for ten years. The navy in 1883 consisted of 68 vessels (11 ironclads, 30 steam vessels), with 320 guns. The emperor is Franz Joseph I; born 1830; crowned December 2, 1848.

BELGIUM.—Kingdom; area, 11,378 sq. miles; pop., 1880, 5,519,844; capital, Brussels, 164,598. Most of the people Roman Catholics; 16,000 Protestants and 3,000 Jews. Revenue, 1884, $63,227,830; expenditures, $65,374,150; public debt, 1884, $337,371,090. Imports, 1882, $326,179,280; exports, $260,054,000. Army, peace footing, 46,383. Railways in operation, 1883, 2,634 miles, two-thirds owned and managed by the government; miles of telegraph, 1882, 3,213. The great interests are agriculture and manufacturing. Belgium a great workshop. Education promoted by government. King Leopold II, born 1835, called to throne December 10, 1865.

BOLIVIA.—Republic; named in honor of Bolivar; area, 536,200 sq. miles; pop. estimated 2,400,000, including Indians; divided into 9 departments, each having a distinct governor. The goverment is popular in form, three legislative chambers being elected for four years, eight years and for life. The president is elected for life by a majority of the collective legislature. President, Nicolas Campero, inaugurated June 30, 1880. The administration belongs wholly to the ministry, which is responsible to the Senate. Religion is free, the Roman Catholic being the prevailing form. Public debt, 1881, $21,925,000; revenue, $2,527,515, 1883; one-fifth was derived from customs, one-fifth from Indian tribute and one-tenth from the sale of guano; expenditure, $3,300,528. Imports, 1881, $6,150,000; exports, $9,381,973. Bolivia abounds in high plateaus suited to wheat, has much valuable timber; low-lands clothed with tropical forests and swampy; climate varied; coffee, cotton, sugar-cane, garden vegetables and fruits, staples. Western Bolivia contains the highest mountains of the two Americas, with frequent volcanoes. The Cordillera culminate in the peak of Sorata, 24,800 feet high. The silver mines of Potosi, famous for richness, have yielded over $1,600,000,000 since 1545. Roads bad; railroads almost unknown, great natural difficulties in the way of their construction.

BRAZIL.—Empire; area, 3,287,964 sq. miles; pop. estimated at 12,500,000; largest of the South American countries; discovered by Spaniards in 1500; a Portuguese possession, passed under Spanish rule, but reverting to Portugal in 1640. The legislative power is vested in a Senate of 58 members elected for life and a Chamber of Deputies, 122 members, chosen for four years by direct suffrage. The executive power is vested in the emperor (now Don Pedro II, Alcantara, born 1825, called to throne 1831) and his ministers and secretaries of state. Divided into twenty provinces, comprising 642 municipalities, each having a council chosen directly by citizens. Public debt about $431,584,400, of which $85,000,000 is paper money; revenue, 1884, $66,524,700, more than one-half custom duties, and one-sixth from export duties; the expenditure in 1884 was $75,727,168. The army consists of 11,333 men, raised to 32,000 on a war footing; the naval force embraces 35 steam vessels, with 123 guns and 5,704 seamen. Free public schools supported by state exist; in some provinces instruction compulsory. Roman Catholic religion established; other forms tolerated if practiced privately; dissenters enjoy civil rights. There are 23 lines of steam vessels, besides the North American Line, between Brazil and New York. The imports, 1884, $90,354,-860; exports, chiefly coffee, hides and sugar, $108,354,900. By a decree of 1867 the Amazon opened to the trading ships of all nations. In 1874 submarine telegraph cable was completed from

Europe. Roads bad; railways rapidly extending by state and private enterprise; miles of railway, over 2,000.

CANADA, DOMINION OF.—Confederate government, embracing British North American Provinces of Ontario, Quebec, New Brunswick, Nova Scotia, Manitoba, British Columbia, Northwest Territory, Vancouver's Island, and Prince Edward Island. Has a representative Parliament, meeting annually at Ottawa, the capital; senators, 77 in number, nominated for life, by summons of Governor-General; House of Commons, 206 members, elected by the people for five years; right of suffrage subject to property qualification. The Governor-General, appointed, 1883, is the Marquis of Lansdowne, salary, $50,000. Debt, 1883, $202,159,104. Revenue, 1883, $35,794,650, derived from customs, excise, public works, including railways and canals and postoffice. Expenditure, 1883, $28,730,157. Population, 1881, 4,352,080. Indian population, 99,650. Miles railway, 1885, 9,066; miles under construction, 2,299.

CHILI.—Republic; area, 124,084 square miles; population estimated 2,500,000, including about 50,000 Indians; a mountainous country subject to earthquakes; has almost every variety of climate, its long, narrow territory extending from the hot deserts near the equator to the cold and wet region within twelve degrees of the Antarctic Circle. One-quarter of the country is near the level of the sea, while the great Andes range of mountains rise to a mean elevation of 11,830 feet, the highest peak (Aconcagua) being 22,427 feet; originally a Spanish settlement: became independent in 1810–'17. Legislative power is in a National Congress composed of 37 members, elected for six years, and a Chamber of Deputies, 109 members, for three years. Suffrage universal to citizens able to read and write and paying a small annual tax. The executive power resides in a President, elected for five years, a council of state and five cabinet ministers, having salaries of $6,000 each. President Domingo Santa Maria, elected 1881, salary $18,000. Debt in 1884, $87,644,520. Revenue, 1884, $44,160,120, one half from customs and monopolies. Expenditure, $46,536,550. Exports, $71,374,126, 1882. Imports, $53,502,214. Agriculture flourishes. About 80% of entire surface desert, pasture or forests, with only 20% arable land. Wheat the most important product, crop averages over 10,000,000 bu. Rich in gold, silver and copper. Army, 1883, 13,926 men. Navy, 22 steam vessels, manned by 2,225 men. Education largely aided by government, which supports 810 schools through the country, besides lyceums and the University of Chili, with 700 students, 37 professors, and free instruction. Roman Catholic religion recognized by constitution, but public profession of other forms tolerated.

CHINA.—Empire; area, 4,560,107 sq. miles; pop. 375,000,000 (estimated); has of late years opened diplomatic and commercial intercourse with other nations. It includes Tibet, Mongolia and Manchuria, besides China proper; the country abounds in numerous rivers, forming the chief highways of the empire. The government despotic, Emperor absolute; present Emperor Kwang Sü, born 1871, called to throne 1875. Civilization the most ancient in the world; comparatively unknown to Europe and America; the exclusiveness slowly giving way. The empire now sends ministers to the United States, England, France, Germany, Russia, Spain, the West Indies and Japan. Fourteen of its numerous ports open to foreign trade. Imports, 1882, $116,572,842; exports, $101,005,269. Silk and tea make up three-fourths of the exports, while opium and cotton goods constitute two-thirds of the imports. Revenues estimated at $121,500,000. Public debt unknown. One foreign loan of $9,750,000 at 8%, re-

cently contracted, and guaranteed by the customs receipts. Army, 270,000 men, organized after the European custom. On paper 800,000 Chinese and 271,000 Manchoos. The navy embraces 56 vessels. Miles of railroad, 6.

COLOMBIA (the United States of).—Republic; includes a large part of New Granada; area 320,635 sq. miles; pop. 3,300,000 whites: 10,000 Indians. Present political organization dates from 1863. Largest city, Bogota (capital), pop. 50,000. Panama 20,000 pop. Legislative power vested in a senate of 27 members, and a representative chamber of 61, elected by general suffrage. The executive power is exercised by a president chosen for two years by the people of the different states, and by four ministers. President, E. Nunez, elected, 1884. Revenue, 1883, $6,244,000, two-thirds from customs. Expenditure, $6,744,000, 1883. Debt, $21.-589,527, 1883. Imports, 1883, $16,032,500. Exports, $5,625,000. Coffee, cotton, tobacco and cinchona bark chief exports. Agriculture the leading industry. Two railways in operation. Panama line across the Isthmus, 46 miles, being the principal one. Telegraphs, 1,820 miles. No navy. Army 3,000 men. Education recently much improved, in hands of the state which requires compulsory instruction; general public subsidizes the states to maintain schools. Religious freedom prevails. No state church. Predominant religion Roman Catholic.

COSTA RICA.—Republic; area, 21,495 sq. miles; pop. (estimated 215,000, mostly Spanish descent. Contains six provinces. Government vested in a President elected for 4 years, two vice-presidents and four ministers. President, Prospero Fernandez, elected 1882. The legislative power is in a congress of deputies chosen for 4 years. Revenue, 1883, $1,607,425, one-third from monopoly of tobacco and brandy by the government, the rest from customs and various taxes. Expenditure, $2,504,130. Debt, $16,950,000. Exports, 1880, $4,134,920, coffee alone, $3,728,000. Imports, $3,140,961, chiefly manufactures. Standing army, 900. Militia, 16,370 men, all between age of 15 and 30. State religion Roman Catholic. Religious liberty guaranteed by the constitution. Soil extremely fertile. Vast forests of mahogany, ebony, Brazilwood, and India-rubber trees. Climate fosters almost all fruits of the tropic and temperate zones, about 1,100 square miles under cultivation. Railways, 105 miles; telegraphs, 451 miles.

CUBA.—A colony of Spain, area, 72,000 sq. miles; population estimated, 1,750,000, half blacks and enfranchised slaves. Island governed by a Captain-General, appointed by the Spanish crown. Staple is sugar, of which 450,000 to 600,000 tons are annually exported, two-thirds to the United States, besides 4,000,000 to 5,000,-000 gallons of molasses.

DENMARK.—Area, 14,553 sq. miles; population, 1880, 2,096,400. Constitutional kingdom. Climate is like that of Scotland. Mean annual temperature 47 deg. at Copenhagen. Constitution vests the legislative power in the Rigsdag, consisting of a Folkething, 102 members, and a Landsthing, 66 members. Folkething elected for three years by universal suffrage, Landsthing for eight years by electoral districts, except 12 members nominated for life by the King. King, Christian IX, born 1818. Called to throne, 1863. Seven ministers. Receipts, $13,674,025; $8,300,000 from indirect and $2,300,000 from direct taxes. Expenditure, $14,808,805; debt, 1883, $64,786,910. Army (recruited by conscription), 35,727 men; reserve, 15,258. Navy, 1882, included 33 steam vessels, 230 guns and 29 sail vessels. Imports, 1881, $64,744,310; exports, $51,576,810, chiefly grain and provisions. There are 1,105 miles of railway, two-thirds operated by the state. Government telegraph, 2,283 miles.

Established church Lutheran, Protestant; Roman Catholics tolerated in Scandinavia. Lutherans, 1883, 1,777,000; Jews, 4,300; Baptists, 3,200; Mormons, 2,200; Roman Catholics, 1,800. Education compulsory.

ECUADOR.—Republic, traversed by the equator, from which it takes its name; area, 248,312 sq. miles; population, 1,500,000, including Indians; capital, Quito, population, 80,000; Guayaquil, principal seaport, 26,000. Quito is the loftiest inhabited city, 9,500 feet above the sea. Country traversed by the two vast mountain ranges of the Cordilleras, reaching to a height of 18,000 feet; many volcanoes and mountains divided by magnificent valleys. Cotopaxi and Chimborazo famous peaks. Government vested in a President, chosen by 900 electors appointed by popular vote. President, J. M. P. Caamayno, elected, 1883; Vice-President, who is Minister of the Interior, and three other cabinet officers. The Congress consists of a Senate of sixteen, and a House of thirty members, chosen by popular suffrage. Army 1,200 men. Navy three small steamers. Revenues, 1883 (half from customs), $3,050,000; expenditures, $3,688,000. Debt, 1883, $16,125,000. Roads almost unknown, mostly mere mule tracks. All transportation is on the backs of mules or by hand. Miles of railway, 75. Principal export, cacao, $4,539,641, out of a total of $7,193,645; imports, $6,000,000. Religion, Roman Catholic. Education is in the hands of the clergy, with about 600 schools, one university and several colleges.

EGYPT.—Dependency of Turkey; area, 1,152,948 sq. miles; population 18,000,000 (estimated), including Nubia and Soudan. Imports, 1881, $35,554,340; exports, $68,423,150. Executive power absolute, in hands of the Khedive, a prince tributary to the Sultan. Largest city Cairo, 349,883 inhabitants. Revenue, 1881 (estimated), $52,621,350; expenditures, $51,930,400. Debt, $508,625,840. Army, 15,000 men; navy, 14 vessels. Railways in 1882, 942 miles; telegraphs, 5,260 miles.

FRANCE.—204,030 sq. miles; population 1881, 37,682,048. Legislative power vested in a *Corps Legislatif*, consisting of a Senate of 300 members, 225 of whom are chosen for 9 years by the departments and the colonies, and 75 for life by the National Assembly; and a Chamber of Deputies, now 532 members, elected by universal suffrage, one deputy to each 100,000 inhabitants. Salary of Senators and Deputies, $1,800. Every Frenchman of 21 years has the right to vote, and there were in 1876, 9,948,070 legal voters. Executive power is vested in a President, elected for seven years by a joint assembly of the Senate and the Chamber of Deputies; salary, $120,000 and $32,480 for household expenses; has power to dissolve Chamber of Deputies upon the advice of the Senate. President, F. P. Jules Grévy, elected 1879. The ministry consists of nine members, responsible to the Chambers for conduct of the government. President responsible only in case of high treason. France is divided into 87 departments, subdivided into 362 "arrondisements," 2,865 "cantons," and about 36,000 "communes." The President appoints a prefect for each department, who is head of the police, issues local decrees, superintends tax collection and represents the government as general agent, assisted by a council elected by the people. Funded debt, $4,750,337,109; floating debt, $65,000,000. Revenue, 1883, $713,718,598; expenditure, $712,542,421. Imports, 1883, $1,028,496 400; exports, $752,215,000. Miles of railway Jan. 1, 1883, 18,023. Revenues derived chiefly from excise and stamp taxes. Army, 503,000 men in peace and 19,057 officers, costs about $115,000,000 per annum. Every Frenchman of 20 years owes five years active service with slight exemptions. Navy, 302 vessels, 1,758 officers, and about 50,000 marines. Roman Catholic Church most powerful. Pro-

vision is made for public instruction, every commune having to maintain primary schools. Education neither gratuitous nor compulsory. Half the people engaged in agriculture, and the multitude of small landed proprietors is great; 9,000,000 land owners; value of land under tillage varies from $105 to $323 per acre.

GERMANY.—Empire area; 208,624 square miles; pop., 1880, 45,194,172. It is a union of 25 sovereign states, consisting of 4 kingdoms, 6 grand duchies, 5 duchies, 7 principalities, and 3 free towns. Alsace-Lorraine, ceded by France, 1870-71, forms a 26th member, but is governed by imperial authority. Germany is a constitutional monarchy, the Emperor (Wilhelm I, born 1799; crowned 1871) exercising imperial power in the name of the 25 confederate states. The Bundesrath, or federal council, has 59 members appointed for each session by the government of the several states. The Reichstag, or House of Representatives, has 397 members, elected for 3 years by universal suffrage—every German of 21 years being an elector. The sessions of the legislature are annual, and every law must receive a majority of the whole number of members of both houses, and the sanction of the Emperor. Revenue, 1884, $147,704,835; half from customs, one-third excise on sugar, salt, tobacco, spirits and malt, and remainder from various sources. Expenditure, $147,695,846; $90,600,000 for army. Debt, $99,000,000 funded, $38,000,000 floating. Army on peace footing, 445,462 men. Military service compulsory upon every German capable of bearing arms. Navy 86 vessels, 965 officers and 15,000 men. Education compulsory; number schools, 60,000. There are 360 gymnasia for preparatory training for the universities; of the latter there are 21, with 1,913 professors. Population embraces about 27,000,000 Protestants, 15,000,000 Roman Catholics, and 500,000 Jews. Imports, 1883, $822,719,125; exports, $833,874,365; miles railroad, 21,693; 11,000 miles worked by the government. Miles of telegraph lines, 41,411. Postal and telegraphic départments managed by the government.

GREAT BRITAIN.—Kingdom, embraces England, Wales, Scotland, Ireland and the Channel Islands, area 121,571 sq. miles; pop., 1881, 35,246,633; has also immense landed possessions in all parts of the globe; its colonies in Asia, chiefly British India, embrace over 250,000,000 inhabitants, in America over 5,000,000, and in Australia 2,700,000. Legislative power is in Parliament, which holds for 7 years unless sooner dissolved by royal proclamation. The House of Lords (537 members in 1880) consists of 5 peers of the Queen's family, 2 archbishops and 24 bishops, 201 dukes, marquises, earls and viscounts, 261 barons, 16 Scottish and 28 Irish representative peers; all of these but the last named hold for life. The House of Commons consists of 658 members elected by limited suffrage, of whom 40 constitute a quorum to do business; members of Parliament receive no salary. Executive government nominally in the Crown, is practically in the Cabinet, consisting of 13 members, whose tenure of office is dependent upon their measures commanding a majority in the House of Commons. At the head of the Cabinet is the First Lord of the Treasury, known as the Premier or Prime Minister; he dispenses the patronage of the Crown, his colleagues being appointed at his recommendation. Revenue, 1884, $436,025,920; expenditure, $434,997,820, of which $157,000,000 was for the army and navy, Public debt, 1884, $3,732,110,820. Imports, 1884, $2,134,457,895; exports, $1,527,185,350. Army, 1883, 181,971 men, 7,199 officers, 136,778 militia and 102,810 volunteers. Navy, 246 vessels. Miles railroad, 1883, 18,457; telegraph, 27,103 miles, owned and operated by the government. Expenditure for elementary schools, $20,000,000 in 1883. England abounds in iron, tin and coal mines, the product of pig iron amounting to about $80,000,000 per annum, and of coal

about $230,000,000. Textile industries are of enormous extent, employing nearly 1,000,000 hands; the metal manufacturers come next, employing 650,000 hands. Agriculture excellent. The land held by a small number of proprietors. Established church Episcopal, in Scotland, Presbyterian. In Ireland no church is now established by law. A free-trade country. Queen, Victoria I, born 1819; crowned, 1837.

GREECE.—Kingdom; area, 20,018 sq. miles; pop. 1879, 1 979,423. Governed by George I, born 1845, elected king 1863. Legislative power vested in a Parliament of a single chamber of 187 deputies, elected for 4 years by universal suffrage. Revenue, 1884, $16,340,000, a third from customs. Expenditure $14,967,900. Debt $90,496,660, 1884. Imports, 1881, $19,586,270; exports $12,091,160, principally raisins, currants and olive oil. Army 29,368 men, capable of increase to 200,000 in war. Navy has 11 steamers and 10 sailing vessels. Commercial marine 5,001 vessels. Greece has only 7½ miles of railway, from Athens to the Piræus, and 2,916 miles of telegraph. Post-offices, 415.

GUATEMALA.—Republic; area, 44,800 sq. miles; pop., 1872, 1,197,054, of which 360,608 were whites and 830,146 Indians; revenue in 1883, $6,725,000, one-third imports; expenditures. $6,625,000; debt, $8,203,060; imports, 1884, $2,630,700; exports, $3,716,240, 1884, principally coffee. Miles of railway, 105; and ones is commenced traversing the republic from the Caribbean Sea to the Pacific. Miles of telegraph, 1,100, operated by the government. Public instruction is cared for by the government; army 2,180 men; no navy. Capital, Gautemala, 59,000 inhabitants, finest city in Central America. Executive power vested in a president and cabinet of 4 ministers. Legislative power is in a National Assembly.

GUIANA.—Climate hot. Principal products, sugar, rum and molasses and fine woods. British Guiana—86,000 sq. miles, with 248,110 inhabitants in 1879—is divided into Essequibo. Demerara, and Berbice; has a governor appointed by the British Crown; capital, Georgetown; pop. 36,562. Imports, 1879, $10,325,225; exports, $13,577,675. French Guiana, area 48,000 sq. miles; pop., 1877, 36,760; capital, Cayenne, on the island of the same name, which is a French penal settlement. Dutch Guiana, or Surinam, lies between British and French; area 45,000 sq. miles; pop. 68,255, four-fifths of whom are negroes; capital, Paramaribo.

HAYTI.—Republic; area estimated 8,000 sq. miles; pop. 550,000, nine-tenths negroes, the rest chiefly mulattoes. Language French. State religion Catholic. Legislative power is in an assembly and a president, chosen for four years. President, Gen. Salomon. Revenue, 1882, $5,875,000, three-fourths from duties on imports and exports. Expenditure, $5,689,000; debt, $14,000,000. Army 6,828 men; navy 2 steam corvettes with 8 guns. Imports, 1881, $7,283,621; exports, $6,240,460, chiefly coffee, cotton and cocoa.

HAWAIIAN ISLANDS.—Kingdom ruled by Kalakaua I. Area, 6,000 sq. miles; pop. 42,000. Sugar chief product.

HONDURAS.—Republic; area, 58,168 sq. miles; pop. 876,410. Governed by a president (Luis Bogran, elected 1883), a single minister, and an assembly of 37 representatives. Revenue, 1882, $1,120,000, a third from customs and about a third from monopolies. Expenditure nearly same. Debt, $31,000,000. Exports,

$1,305,000. Army about 1,500 men. One line of railway 56 miles long; 1,000 miles of telegraph. Education prominent.

ITALY.—Kingdom; area, 114,380 sq. miles; pop., 1881, 28,459,451, 26,658,679 Catholics. Divided into 69 provinces. Government a constitutional monarchy, with a senate of 270 members appointed for life, and a chamber of 508 deputies elected by general suffrage. Absolute freedom of the press prevails. The government supports education, which is compulsory and free. Agriculture, silk, cotton, woolen and straw manufactures chief pursuits. Italy abounds in populous cities, of which Naples, 450,804, is the largest, and Rome, the capital, has 303,383. Revenue, 1883, $307,545,000; expenditure, $311,135,315; debt, $2,261,903,485; imports, 1883, $276,172,130; exports, $239,732,259, of which silk made $56,000,000. Standing army, 750,765; militia, 553,005; navy, 72 vessels with 339 guns; 5,324 miles of railway in 1882, and 16,753 miles of telegraph. Umberto I, King, born, 1844; crowned, 1878.

JAPAN.—Empire, ruled by a Mikado, aided by a great council, and without a legislative body; area, 146,613 sq. miles; pop., 1882, 36,700,118. Revenue, 1883, $63,319,140, four-fifths from land tax; expenditures, $62,648,390; debt, $270,545,621. Army 36,777 men in 1882, navy 27 steam vessels with 5,551 men. Imports, 1883, $29,168,041; exports, $37,235,775, one-half raw silk. Railroads, 220 miles; telegraphs, 4,733 miles; postoffices, 5,094. Mikado, Mutsu Hito, born, 1852; crowned 1867.

MEXICO.—Republic; area, 741,598 sq. miles; pop., 1877, 9,389,461; divided into 27 states, besides Lower California and the federal district; governed by a president elected for 4 years (President, Porfirio Diaz, elected 1883), a senate of 56 members chosen for 6 years and a house of deputies of 331 members for 2 years. The chief justice of the supreme court, elected for 6 years, is vice-president. Each state has local constitution, with elective governors and legislatures. Language, Spanish; Catholic religion predominates, though all are equally protected; 4,000 public schools; railways rapidly extending, about 3,200 miles in operation. The country is rich in agriculture and mineral wealth, vast table-lands, varying from 3,000 to 5,000 feet in elevation, producing almost every variety of grain and vegetables, while in the warmer regions oranges and other tropical fruits grow profusely. Coffee and cotton are largely cultivated. The northern states are full of vast herds of cattle and sheep. Manufactures are poorly developed; commerce increasing. Imports, $30,271,000; exports, $40,875,000. Navigable rivers rare. Revenue, 1884, $36,060,000, $12,500,000 was from custom duties; expenditure, $33,316,630; public debt, $144,700,000 to $395,500,000. Army, 22,330 men; the navy, 8 small gunboats. Capital, Mexico, built in 1521, on Lake Tezcoco, 7,435 feet above the sea level; pop., about 250,000.

NETHERLANDS.—Kingdom; area, 12,727 sq. miles; pop., 1880, 4,060,580, nearly all natives of Holland. Revenue, 1883, $44,464,919; expenditure, $55,966,396; debt, 1883, $376,908,500. Army, 1883, 65,113 men; navy, 1880, 165 vessels, 503 guns and 5,197 men. Imports, 1883, $396,843,039; exports, $300,824,984. Railways, 1883, 1,390 miles, half managed by the state; telegraphs, 2,582 miles. Post-offices, 1,300. King, William III, born 1817; crowned 1849.

NICARAGUA.—Republic; area, 58,000 sq. miles; pop., 360,000 (estimated), one-half Indians; largely covered with forests of mahogany, rosewood and dye-woods. Country distracted by internal dissensions. Governed by a president elected for 4 years, a cabinet of 4 ministers, a senate of 10 members and an assembly

of 11 representatives. Revenue, 1882, $1,624,180; expenditure, rather more; debt of $1,128,274. Exports, $4,022,000; imports, $3,362,000. Principal exports, coffee, elastic gum and gold and silver bullion. President, Adam Cordenas, elected 1883.

PARAGUAY.—Republic; area, 91,980 sq. miles; pop. in 1876, 293,844; has no cities and almost without civilization. Language is chiefly Indian, mixed with a little Spanish. Government, though nominally republican, under control of Brazil. The country owes $236,000,000. Revenue, 1882, $450,000; expenses, $313,429. Imports, 1882, $1,278,000; exports, $1,812,000. Army, 500 men. Railway, 45 miles; telegraph lines, same length. President, General B. Caballero, elected 1882.

PERSIA.—Ruled by Shah, with absolute power over all subjects within the limits of the Mohammedan religion. Through his direction the executive powers are exercised by a Ministry of seven departments. Shah, Nassr-ed-Din, crowned 1848. The whole revenue of the country is at his disposal.

PERU.—Republic; area, 432,297 sq. miles; pop. in 1876, 3,050,000. Governed, under a constitution, by a president chosen for 4 years (Gen. Caceres), a senate of 44, and a house of representatives of 110 members. Revenue, 1879, $66,900,000; expenditures, $68,600,000; debt, $241,340,684. The revenue is chiefly derived from the sale of guano and the nitrate of soda. Imports, 1879, $24,000,000; exports, $31,000,000; army, 4,670 men, 1,000 gendarmes and 1,200 vigilantes. There were 1,750 completed miles of railway and 600 more in construction in 1879. Silver largely mined, annual product $4,000,000. Soil fertile, producing cotton, sugar, grapes and olives, while the forests abound in the cinchona-tree, which yields the precious Peruvian bark, or quinine. Capital, Lima; population in 1876, 101,488.

PORTUGAL.—Kingdom; area, 34,595 square miles; population, 1878, 4,348,551. The legislative power is in a cortes with a chamber of 100 peers, appointed for life by the king, and a chamber of deputies, 149, elected by the people. Revenue, 1884, $34,661,150; expenditure, $35,051,907; debt, 1883, $490,828,642. Imports, 1882, $26,950,000, exports, $18,998,000. Army, 1883, 33,994; navy, 44 vessels, with 156 guns and 3,470 men. Railways in 1879, 750 miles; telegraphs, 2,300 miles; postoffices, 903; king, Luis I, born 1838, crowned 1861.

RUSSIA.—Empire; area, 8,138,541 sq. mile; population, 98,356,100. Revenue, 1883, $450,375,365; expenditure, $459,063,204; debt, 1885, $3,754,866,210. Army, 1883, 780,081 men; navy, 389 men-of-war with 561 guns. Imports, 1882, $224,100,000; exports, $460,150,000. Railways in 1882, 15,885; telegraphs, 69,412 miles. Postoffices, 4,521. Emperor, Alexander III., absolute, born 1845; crowned, 1881.

SAN SALVADOR.—Republic; area, 7,226 sq. miles; population in 1878, 482,422. Governed by a president elected for four years, a ministry of 5 members and a congress of 12 senators and 24 deputies, elected for 2 years. Suffrage is universal, except for servants and persons without legal occupation. Education moderate. Roman Catholic religion recognized, others protected. Army, 1,000 men. Revenue, 1883, $4,060,300; expenditure, $4,200,000; debt, $2,078,855; imports, 1883, $3,017,210; exports, $5,220,720, one-half indigo, and one-third coffee. President, Rafael Z. Laso, elected 1876.

SWITZERLAND.—Republic; area, 15,908 sq. miles; population, 1880, 2,831,787. Legislative body consists of a national council of 141 members, or 1 to every 20,000 inhabitants, elected for three years, and of a council of states of 44 members, two for each canton. The executive power is in a federal council, chosen for three years by the federal assembly, and in a president of the Swiss confederation, elected for one year by the federal assembly from the members of the federal council. Revenue, 1883, $8,667,060; expenditure, $8,556,940; debt, $6,120,780. Army (all men between 22 and 32), 119,440, besides the landwehr, comprising all between 33 and 44, 91,595 in 1880. Railways, 1,735 miles; telegraphs, 4,020 miles. Postoffices, 2,874. President, Dr. K. Schenk, elected 1885.

SIAM.—The legislative power exercised by King, in conjunction with Supreme Council of State and Council of Ministers. The royal dignity hereditary. King Chulalonkorn I. succeeded to the throne in 1868.

SWEDEN AND NORWAY.—Kingdom; King, Oscar II, born 1829, crowned 1872. United under one dynasty. Sweden, 170,927 sq. miles; population, 1881, 4,565,668. Revenue, $21,894,760; expenditure, $21,638,480; debt, 1883, $66,372,410; army, 40,548 men; navy, 42 steamers and 97 small vessels, with 218 guns. Imports, 1881, $79,180,640; exports, $62,260,040. Railways, 3,637 miles, one-third operated by the state; telegraphs, 16,421 miles; postoffices, 1,800. Norway, 122,823 sq. miles; population, 1876, 1,806,900. Revenue, 1883, $11,770,000; expenditure, $10,930,000; debt, 1883, $28,791,240; imports, 1882, $44,576,390; exports, $34,154,415; army, 18,750 men; navy, 1881, 29 steamers and 88 small vessels, with 154 guns. Railways, 972 miles, telegraphs, 5,672 miles, operated by the government. Postoffices in 1581, 938.

SPAIN.—Kingdom; area, 193,171 sq. miles; population, 1877, 16,333,293. Legislative power in the Cortes, a senate and a chamber of deputies, elected for 5 years by indirect suffrage. Revenue, 1883, $176,066,280; expenditure, $176,046,280; debt, 1884, $1,190,000,000; imports, 1882, $122,088,079; exports, $127,661,841; army, 152,895 men; navy, 124 vessels and 552 guns. Railways, 1882, 5,600 miles; telegraphs, 10,417 miles, Postoffices. 2,655. King, Alfonso XII, born 1857, crowned 1874.

SANTO DOMINGO.—Republic; forms the larger portion of the island of Hayti, lying east of the republic of that name; area, 20,591 sq. miles; population, 1876, 250,000 (estimated), principally mixed Spaniards, Indians and negroes. Language, Spanish. Established religion, Roman Catholic. Government vested in a president elected for 6 years, who appoints a council of 4 ministers, a senate of 9 members, also chosen for 6 years, and a house of 15 members. Revenue, 1882, $1,500,000; expenditure, $1,381,000; debt, $3,780,060. Imports, $1,761,316; exports, $1,691,075, chiefly tobacco and sugar. Soil fertile; climate mild and salubrious. Civilization backward. Education neglected. No roads; transportation on the backs of horses and mules. Army, 4,000 men; navy, 5 small vessels, with 44 guns. Capital, Santo Domingo, pop. 6,000. President, General Bellini, elected 1884.

TURKEY.—Monarchy; area, 935,110 sq. miles; pop. in Europe, 8,866,500; in Asia, 18,000,000 (estimated). Governed by a sultan, Abdul Hamid II, born 1842, crowned 1876, who is irresponsible, convoking and dissolving the general assembly at his pleasure. The ministers are responsible to the chamber of deputies; the senate are nominated for life by the sultan, and

the deputies elected by secret ballot, one to every 150,000 males. Revenue, $68,430,000; expenditures, $70,495,000. Debt, 1883, $538,186,170. Imports (estimated), $107,000,000; exports, $99,000,000. Army (compulsory service for 20 years), 160,417 men; navy, 116 steam vessels, 50 sail vessels, and 1,600 guns. Railways, 889 miles; telegraphs, 17,950 miles.

URUGUAY.—Republic, area, 72,151 sq. miles, pop. 525,000 (estimated). Governed by a president (Maximo Santos, elected 1882), a ministry of 4 and a legislature of 13 senators and 40 representatives. Revenue, 1883, $9,920,000, three-fourths from customs. Expenditures, $9,925,000; debt, 1883, $61,57 ,204. Imports, 1882, $20,918,884; exports, $22,229,512; 6,000,000 hides. Army, 4,500 men. 418 miles of railway in operation, and 1,405 miles of telegraph. There are 294 postoffices. Capital, Montevidio; pop., 1877, 91,167.

VENEZUELA.—Republic, formed after the dissolution of the republic of Colombia, 1864; area, 439,119 sq. miles; population estimated at 2,500,000. The confederation includes 20 states, besides the federal district, each having its own distinct government, and electing delegates to the congress, which meets annually at Caracas, the capital city, pop. 50,000. The president is elected for 2 years. Revenue, 1883, $5,801,000, four-fifths from customs and tonnage duties; expenditure, $5,320,405; public debt, 1883, $21,010,000. Imports, 14,800,000, 1882; exports, $15,300,000, chiefly coffee and cocoa. One railway, 94 miles long. Army, 3,000 men. President, Joaquin Crespo, elected 1884.

LENGTH OF THE CHIEF RIVERS OF THE WORLD AND THEIR LOCATION.

NAME AND COUNTRY.	LENGTH.
Rhine, Europe	960
Ohio, N. A.	665
Snake, N. A	1,050
Colorado	1,060
Columbia, N. A	1,200
Dnieper, Europe	1,230
Don, Europe	1,300
Amur, Asia	1,500
San Francisco, S. A	1,550
Orinoco, S. A	1,550
Saskachewan, N. A	1,600
Red, N. A	1,600
Danube, Europe	1,725
Rio Grande, N. A.	1,800
Madeira, S. A	2,000
Mekong, Asia	2,000
Arkansas, N. A.	2,000
St. Lawrence; N. A	2,200
Mackenzie, N. A	2,300
Congo, Africa	2,400
Volga, Europe	2,400
Lena, Asia	2,700
Hoang-ho, Asia	2,800
Niger, Africa	3,000
Obi, Asia	3,000
Missouri, N. A	3,000
Mississippi, N. A	3,160
Yank-tse-kiang, Asia	3,200
Yenisei, Asia	3,400
Amazon, S. A	3,750
Nile, Africa	5,100

CITIES OF THE WORLD,

CONTAINING 100,000 INHABITANTS OR MORE.

[*Compiled from the latest official reports or estimated from reliable data.*]

UNITED STATES.	
Minneapolis	129,200
Baltimore, Md	332,313
Boston, Mass	390,406
Brooklyn, N. Y	566,689
Buffalo, N. Y	149,500
Chicago, Ill	650,000
Cincinnati, O	280,000
Cleveland, O	155,946
Detroit, Mich	133,269
Jersey City, N. J	156,300
Louisville, Ky	153,513
Milwaukee, Wis	158,509
Newark, N. J	136,508
New Orleans, La	263,000
New York, N. Y	1,314,000
Philadelphia, Pa	903,000
Pittsburg, Pa	174,200
Providence, R. I	118,070
St. Louis, Mo	412,484
San Francisco, Cal	231,841
Washington, D. C	187,928
Kansas City	192,000
St. Paul	111,397
CANADA.	
Montreal	140,747
MEXICO.	
Guadalajara	101,000
Mexico	300,000
SOUTH AMERICA.	
Bahia	140,000
Buenos Ayres	398,498
Lima	101,488
Montevideo	100,000
Pernambuco	116,671
Rio de Janeiro	357,332
Santiago	200,000
Valparaiso	100,000
AFRICA.	
Abookeer	130,000
Alexandria	165,752
Cairo	327,462
Fez	100,000
Porto Novo	100,000
Tunis	125,000
CHINA.	
Canton	1,500,000
Fatschan	400,000
Foochow	600,000
Hangtscheu-fu	400,000
Hanjang	100,000
Hankow	600,000
Hutscheu	200,000
Hutscheu-fu	100,000
Hwangjuen	120,000
Jangtschau	360,000
Jongping	200,000
Kirin	120,000
Leinkong	250,000
Mukden	170,000
Nangkin	450,900
Ningpo	120,000
Pauting-fu	122,000
Peking	500,000
Schaklung	100,000
Schaohing	500,000
Shanghai	278,000
Siangtan	1,000,000
Singan-fu	1,000,000
Sutschau	500,000
Taijuen-fu	250,000
Taiwan-fu	235,000
Tengtschau-fu	230,000
Tientsin	950,000
Tschangtjiakheu	200,000
Tschantschau-fu	1,000,000
Tschaujang	200,000
Tschi-fu	120,000
Tschingkiang	140,000
Tschingtu-fu	800,000
Tschungking-fu	600,000
Tsinan-fu	200,000
Tungkung	120,000
Tungtscho	100,000
Urumtsi	150,000
Victoria	102,000
Weihein	250,000
Wutschang	200,000
Yuentschung	100,000
COREA.	
Saoul	100,000
INDIA.	
Agra	149,108
Ahmedabad	126,873
Allahabad	143,693
Amritsur	142,381
Bangalore	142,513
Bangkok	600,000
Bareilly	102,982
Baroda	112,067
Benares	175,188

Bombay	644,405
Calcutta	683,329
Cawnpore	122,770
Colombo (Ceylon)	111,942
Delhi	160,553
Dhar	100,000
Dhrangdra	101,000
Gwalior	200,000
Hourah	100,000
Hyderabad	200,000
Jondpore	150,000
Kescho	150,000
Lahore	128,441
Lucknow	284,779
Madras	397,552
Mandalah	100,009
Patna	158,960
Puna	118,886
Rangoon	132,004
Singapore	103,000
Sainagar	132,681
Surat	107,149

INDIAN ARCHIPELAGO.

Batavia	104,729
Manila	160,000
Surabaja	100,000

JAPAN.

Hakodate	112,494
Kagoshima	200,000
Kanagawa	108,263
Kioto	229,810
Nagoya	135,715
Osaka	284,105
Tokio	594,283

PERSIA.

Tăbris	120,000
Teheran	200,000

RUSSIA IN ASIA.

Taschkent	100,000
Tiflis	104,024

TURKEY IN ASIA.

Beirut	100,000
Damascus	150,000
Smyrna	150,000

TURKISTAN.

Jarkand	100,000

AUSTRALIA.

Melbourne	252,000
Sydney	187,381

AUSTRIA-HUNGARY.

Buda-Pesth	365,051
Graz	100,000
Lemberg	109,726
Prague	162,323
Trieste	144,844
Vienna	1,103,857

BELGIUM.

Antwerp	169,112
Brussels	162,498
Ghent	131,431
Liège	123,131

DENMARK.

Copenhagen	273,727

FRANCE.

Bordeaux	221,305
LeHavre	105,867
Lille	178,144
Lyon	376,613
Marseilles	360,099
Nantes	124,319
Paris	2,269,023
Reims	100 000
Roubaix	100,000
Rouen	105,906
Saint-Etienne	123,813
Toulouse	140,289

GERMANY.

Altona	100,000
Barmen	100,000
Berlin	1,122,330
Bremen	112,453
Breslau	272,912
Chemnitz	100,000
Danzig	108,551
Dresden	220,818
Düsseldorf	100,000
Elberfeld	100,000
Frankfort	136,819
Hamburg	289,859
Hanover	122,843
Cologne	144,772
Königsberg	149,009
Leipzig	148,081
Magdeburg	100,000
München (Munich)	230,023
Nuremberg	100,000
Stettin	100,000
Strasburg	104,471
Stuttgart	117,303

GREAT BRITAIN.

Aberdeen	105,818
Belfast	207,671
Birmingham	400,757
Blackburn	104,012
Bolton	105,422
Bradford	183,032
Brighton	128,407
Bristol	206,503

Dublin	249,486
Dundee	140,463
Edinburgh	228,075
Glasgow	555,289
Kingston upon Hull	154,250
Leeds	309,126
Leicester	122,351
Liverpool	552,423
London	3,832,441
Manchester	393,676
Newcastle on Tyne	145,228
Nottingham	186,656
Oldham	111,343
Portsmouth	127,953
Preston	100,000
Salford	176,233
Sheffield	284,410
Sunderland	116,262
Wolverhampton	164,303

ITALY.

Bologna	123,270
Catania	100,410
Florence	169,001
Genoa	179,515
Livorno	100,000
Messina	126,497
Milan	321,839
Naples	494,314
Palermo	244,991
Rome	300,467
Turin	252,832
Venice	132,826

NETHERLANDS.

Amsterdam	328,047
'sGravenhage(Hague)	123,499
Rotterdam	157,27.

PORTUGAL.

Lisbon	246,343
Porto	105,838

ROUMANIA.

Bucharest	221,000
Jassy	100,000

RUSSIA.

Charkow	101,175
Chersson	128,379
Kasan	100,000
Kijew	127,251
Kischenew	112,137
Moscow	748,000
Odessa	193,513
Riga	168,844
St. Petersburg	927,467
Warsaw	383,973

SPAIN.

Barcelona	249,106
Madrid	397,690
Malaga	115,882
Murcia	100,000
Seville	133,938
Valencia	143,856

SWEDEN AND NORWAY.

Christiania	122,036
Stockholm	176,745

TURKEY.

Constantinople	60,0000

U. S. INTERNAL REVENUE TAXES.—Latest Revision.

Ale, per bbl. of 31 gallons	$ 1 00
Banks and bankers, on capital and deposits. By Act of March 3, 1883, "to reduce internal revenue taxation," etc., all taxes on capital and deposits of banks and bankers were repealed after March 3, 1883.	
Banks and bankers, on average amount of circulation, each month	½ of 1%
Banks, on average amount of circulation, beyond 90% of the capital, an additional tax each month	⅛ of 1%
Banks, persons, firms, associations, etc., on amount of notes of any person, firm, association (other than a national banking association), corporation, state bank, or state banking association, town, city, or municipal corporation, used and paid out as circulation	10%
Banks, persons, firms, associations (other than national bank associations), and every corporation, state bank or state banking association, on the amount of their own notes used for circulation and paid out by them.	10%
Beer, per bbl. of 31 gallons	$ 1 00
Brandy, per gallon	90
Brewers, manufacturing 500 bbls. or more, annually	100 00
——manufacturing less than 500 bbls. annually	50 00

Cigars, manufacturers of, special tax	$6 00
Cigars of all descriptions, made of tobacco or any substitute, per 1,000	3 00
Cigarettes, not weighing more than 3 lbs. per 1,000, per 1,000	50
Cigarettes weight exceeding 3 lbs. per 1,000, per 1,000	3 00
Cigars or Cigarettes, imported, in addition to import duty to pay same as above.	
Liquors, fermented, per bbl	1 00
Liquors, distilled, per gallon	90
Liquor dealers (wholesale), special tax	100 00
Malt liquor dealers (wholesale)	50 00
Liquor dealers (retail), special tax	25 00
Malt liquor dealers (retail)	20 00
Manufacturers of stills	50 00
Manufacturers of stills, for each still or worm made	20 00
Matches. All taxes on matches, wax tapers, and cigar lights were repealed after July 1, 1883, by act of March 3, 1883.	
Rectifiers, special tax, less than 500 bbls. $100; above 500 bbls	200 00
Snuff, or snuff flour, manufactured of tobacco, or any substitute, per lb	8
Spirits, distilled, per proof gallon	90
Stamps, for distilled spirits for export, wholesale liquor dealers, special bonded warehouse, distillery warehouse, and rectified spirits, each	10
Stamps, on bank checks, drafts, etc. Tax repealed after July 1, 1883.	
Tobacco, all kinds, per lb. after May 1, 1883	8
Tobacco, dealers in manufactured, after May 1, 1883	2 40
Tobacco, manufacturers of, after May 1, 1883	6 00
Tobacco, dealers in leaf, wholesale, after May 1, 1883	12 00
Tobacco, dealers in leaf, retail, after May 1, 1883... $250, and 30 cents per dollar on sales above $500 *per annum*. But farmers and producers may sell tobacco of their own raising to consumers to an amount not exceeding $100 annually.	
Tobacco Peddlers, traveling with more than two horses, mules, etc., after May 1, 1883	30 00
Tobacco Peddlers, traveling with two horses, mules, or other animals, after May 1, 1883	15 00
Tobacco Peddlers, traveling with one horse, mule, or other animal, after May 1, 1883	7 20
Tobacco Peddlers, traveling on foot, or by public conveyance, after May 1, 1883	3 60
Tobacco, Snuff, and cigars, for export, stamps for, each, after May 1, 1883	10
Whisky, per proof gallon	90
Wines and champagne (imitation) not made from grapes grown in the United States, and liquors not made from grapes, currants, rhubarb, or berries, grown in the United States, but rectified or mixed with distilled spirits, or by infusion of any matter in spirits, to be sold as wine or substitute for it, per dozen bottles of more than a pint and not more than a quart	2 40
Imitation Wines, containing not more than one pint, per dozen bottles	1 20
Oleomargerine, per lb	02
Annual Tax on manufacturers of oleomargerine	600 00
" " " wholesale dealers in "	480 00
" " " retail " " "	48 00

GLIMPSES OF COLORADO.

LIST OF

COUNTIES AND COUNTY SEATS

IN THE UNITED STATES.

ALABAMA.

County.	*County Seat.*
Autauga	Prattville.
Baldwin	Daphne.
Barbour	Clayton.
Bibb	Centreville.
Blount	Blountsville.
Bullock	Uni'n Springs.
Butler	Greenville.
Calhoun	Jacksonville.
Chambers	La Fayette.
Cherokee	Centre.
Chilton	Clanton.
Choctaw	Butler.
Clarke	Grove Hill.
Clay	Ashland.
Cleburne	Edwardsville.
Coffee	Elba.
Colbert	Tuscumbia.
Conecuh	Evergreen.
Coosa	Rockford.
Covington	Andalusia.
Crenshaw	Rutledge.
Cullman	Cullman.
Dale	Ozark.
Dallas	Selma.
De Kalb	Fort Payne.
Elmore	Wetumpka.
Escambia	Pollard.
Etowah	Gadsden.
Fayette	Fayette.
Franklin	Bel Green.
Geneva	Geneva.
Greene	Eutaw.
Hale	Greensborough
Henry	Abbeville.
Jackson	Scottsboro.
Jefferson	Birmingham.
Lamar	Vernon.
Lauderdale	Florence.
Lawrence	Moulton.
Lee	Opelika.
Limestone	Athens.
Lowndes	Haynesville.
Macon	Tuskegee.
Madison	Huntsville.
Marengo	Linden.
Marion	Pikeville.
Marshall	Guntersville.
Mobile	Mobile.
Monroe	Monroeville.
Montgomery	Montgomery.
Morgan	Summerville.
Perry	Marion.
Pickens	Carrollton.
Pike	Troy.
Randolph	Wedowee.
Russell	Seale.
St. Clair	Ashville.
Shelby	Columbiana.
Sumter	Livingston.
Talladega	Talladega.
Tallapoosa	Dadeville.
Tuscaloosa	Tuscaloosa.
Walker	Jaspar.
Washington	St. Stephen.
Wilcox	Camden.
Winston	Houston

ARIZONA.

Apache	St. Johns.
Cochise	Tombstone.
Gila	Globe.
Graham	Safford.
Maricopa	Phœnix.
Mohave	Mineral Park.
Pima	Tucson.
Pinal	Florence.
Yavapia	Prescott.
Yuma	Yuma.

ARKANSAS.

Arkansas	De Witt.
Ashley	Hamburg.
Baxter	M'nt'n Home.
Benton	Bentonville.
Boone	Harrison.
Bradley	Warren.
Calhoun	Hampton.
Carroll	Berryville.
Chicot	Lake Village.
Clarke	Arkadelphia.
Clay	Boydsville.
Cleburne	Heber.
Columbia	Magnolia.
Conway	Lewisburgh.
Craighead	Jonesboro.
Crawford	Van Buren.
Crittenden	Marion.
Cross	Wittsburgh.
Dallas	Princeton.

County.	*County Seat.*
Desha	Arkansas City.
Dorsey	Toledo.
Drew	Monticello.
Faulkner	Conway.
Franklin	Ozark.
Fulton	Salem.
Garland	Hot Springs.
Grant	Sheridan.
Greene	Gainesville.
Hempstead	Washington.
Hot Springs	Malvern Junc.
Howard	Centre Point.
Independence	Batesville.
Izard	Melbourne.
Jackson	Jacksonport.
Jefferson	Pine Bluff.
Johnson	Clarksville.
La Fayette	Lewisville.
Lawrence	Powhatan.
Lee	Marianna.
Lincoln	Star City.
Little River	Richmond.
Logan	Paris.
Lonoke	Lonoke.
Madison	Huntsville.
Marion	Yellville.
Miller	Texarkana.
Mississippi	Osceola.
Monroe	Clarendon.
Montgomery	Mount Ida.
Nevada	Prescott.
Newton	Jasper.
Ouachita	Camden.
Perry	Perryville.
Phillips	Helena.
Pike	Murfreesboro.
Poinsett	Harrisburgh.
Polk	Dallas.
Pope	Dover.
Prairie	Des Ark.
Pulaski	Little Rock.
Randolph	Pocahontas.
St. Francis	Forest City.
Saline	Benton.
Scott	Waldron.
Searcy	Marshall.
Sebastian	Fort Smith.
Sevier	Lockesburgh.
Sharp	Evening Shade
Stone	Mou'tain View
Union	El Dorado.
Van Buren	Clinton.
Washington	Fayettville.
White	Searcy.
Woodruff	Augusta.
Yell	Dardanelle.

CALIFORNIA.

County.	*County Seat.*
Alameda	Oakland.
Alpine	Markleeville.
Amador	Jackson.
Butte	Oroville.
Calaveras	San Andreas.
Colusa	Colusa.
Contra Costa	Martinez.
Del Norte	Crescent City.
El Dorado	Placerville.
Fresno	Fresno City.
Humboldt	Eureka.
Inyo	Independence
Kern	Bakersfield.
Lake	Lakeport.
Lassen	Susanville.
Los Angeles	Los Angeles.
Marion	San Rafael.
Mariposa	Mariposa.
Mendocino	Ukiah.
Merced	Merced.
Modoc	Alturas.
Mono	Bridgeport.
Monterey	Salinas.
Napa	Napa City.
Nevada	Nevada City.
Placer	Auburn.
Plumas	Quincy.
Sacramento	Sacramento.
San Benito	Hollister.
San Bernardino	S. Bernardino.
San Diego	San Diego.
San Francisco	San Francisco.
San Joaquin	Stockton.
San Luis Obispo	S. Luis Obispo.
San Mateo	Redwood City.
Santa Barbara	Santa Barbara
Santa Clara	San Jose.
Santa Cruz	Santa Cruz.
Shasta	Shasta.
Sierra	Downieville.
Siskiyou	Yreka.
Solano	Fairfield.
Sonoma	Santa Rosa.
Stanislaus	Modesto.
Sutter	Yuba City.
Tehama	Red Bluff.
Trinity	Weaverville.
Tulare	Visalia.
Tuolumne	Sonora.
Ventura	San Buenaventura.
Yolo	Woodland.
Yuba	Marysville.

COLORADO.

Arapahoe	Denver.
Bent	West Los Animas.
Boulder	Boulder.
Chaffee	Buena Vista.
Clear Creek	Georgetown.
Conejos	Conejos.
Costilla	San Luis.
Custer	Rosita.
Delta	Delta.
Dolores	Rico.
Douglas	Castle Rock.
Eagle	Red Cliff.
Elbert	Kiowa.
El Paso	Colorado Springs.
Fremont	Canon City.
Garfield	Carbonate.
Gilpin	Central City.
Grand	Hot Sulphur Springs.

County.	*County Seat.*
Gunnison	Gunnison.
Hinsdale	Lake City.
Huerfano	Walsenburgh.
Jefferson	Golden.
Lake	Leadville.
La Plata	Parrot.
Larimer	Fort Collins.
Las Animas	Trinidad.
Mesa	Grand Junction.
Montrose	Montrose.
Ouray	Ouray.
Park	Fairplay.
Pitkin	Aspen.
Pueblo	Pueblo.
Rio Grande	Del Norte.
Routt	Hahn's Peak.
San Miguel	Telluride.
Saguache	Saguache.
San Juan	Silverton.
Summit	Breckenridge.
Weld	Greeley.

CONNECTICUT.

Fairfield	Bridgeport.
Hartford	Hartford.
Litchfield	Litchfield.
Middlesex	Haddam.
New Haven	New Haven.
New London	New London.
Tolland	Tolland.
Windham	Brooklyn.

DAKOTA.

Allred	Unorganized.
Aurora	Plankington.
Barnes	Valley City.
Beadle	Huron.
Benson	Minnewaken.
Billings	Unorganized.
Bon Homme	Bon Homme.
Boreman	Unorganized.
Bottineau	Unorganized.
Bowman	Unorganized.
Brookings	Brookings.
Brown	Columbia.
Brule	Chamberlain.
Buffalo	Unorganized.
Buford	Unorganized.
Burleigh	Bismarck.
Butte	Minnesela.
Burdick	Unorganized.
Campbell	Unorganized.
Cass	Fargo.
Cavalier	Unorganized.
Charles Mix	Wheeler.
Choteau	Unorganized.
Clark	Clark.
Clay	Vermillion.
Codington	Watertown.
Custer	Custer.
Davison	Mitchell.
Day	Webster.
Delano	Unorganized.
De Smet	Unorganized.
Deuel	Gary.
Dewey	Unorganized.
Dickey	Ellendale.
Douglas	Grand View.
Dunn	Unorganized.
Edmunds	Unorganized.
Emmons	Williamsport.
Ewing	Unorganized.
Faulk	La Foon.
Fall River	Unorganized.
Flannery	Unorganized.
Foster	Unorganized.
Grand Forks	Grand Forks.
Grant	Big Stone City.
Gregory	Unorganized.
Griggs	Cooperstown.
Hamlin	Spaulding.
Hand	Miller.
Harvey	Unorganized.
Hanson	Alexandria.
Harding	Unorganized.
Howard	Unorganized.
Hettinger	Unorganized.
Hughes	Pierre.
Hyde	Highmore.
Hutchinson	Olivet.
Jackson	Unorganized.
Jerauld	Elmer.
Kidder	Steele.
Kingsbury	De Smet.
Lake	Madison.
La Moure	La Moure.
Lawrence	Deadwood.
Lincoln	Canton.
Logan	Unorganized.
Lugenbeel	Unorganized.
Lyman	Unorganized.
McCook	Salem.
McLean	Unorganized.
McHenry	Unorganized.
McIntosh	Unorganized.
McPherson	Unorganized.
McKenzie	Unorganized.
Mandan	Unorganized.
Mercer	Unorganized.
Meyer	Unorganized.
Miner	Howard.
Minnehaha	Sioux Falls.
Moody	Flandreau.
Morton	Mandan.
Mountraille	Unorganized.
Nowlin	Unorganized.
Nelson	Lakota.
Nickeus	Unorganized.
Pembina	Pembina.
Pennington	Rapid City.
Pratt	Unorganized.
Potter	Unorganized.
Pyatt	Unorganized.
Presho	Unorganized.
Ramsay	Devil's Lake.
Ransom	Lisbon.
Renville	Unorganized.
Richland	Wahpeton.
Reinhart	Unorganized.
Rolette	Unorganized.

County.	*County Seat.*
Rusk	Unorganized.
Sanbon	Forestburgh.
Sargent	Unorganized.
Shannon	Unorganized.
Schwasse	Unorganized.
Scoby	Unorganized.
Sheridan	Unorganized.
Spink	Unorganized.
Stanley	Unorganized.
Stark	Unorganized.
Steele	Hope.
Stevens	Unorganized.
Sterling	Unorganized.
Stutsman	Jamestown.
Sully	Fort Sully.
Todd	Fort Randall.
Towner	Unorganized.
Traill	Caledonia.
Tripp	Unorganized.
Turner	Swan Lake.
Villard	Unorganized.
Union	Elk Point.
Walsh	Grafton.
Wagner	Uorganized.
Wallace	Unorganized.
Walworth	Unorganized.
Washabaugh	Unorganized.
Washington	Unorganized.
White River	Unorganized.
Wells	Unorganized.
Williams	Unorganized.
Wynn	Unorganized.
Yankton	Yankton.
Ziebach	Unorganized.

Wahpeton Reservation.
Sisseton Reservation.

DELAWARE.

Kent	Dover.
New Castle	Willmington.
Sussex	Georgetown.

DISTRICT OF COLUMBIA.

Cities.	
Georgetown	——
Washington	——

FLORIDA.

Alachua	Gainesville.
Baker	Sanderson.
Bradford	Lake Butler.
Brevard	Titusville.
Calhoun	Iola.
Clay	Green Cove Sprgs.
Columbia	Lake City.
Dade	Miami.
Duval	Jacksonville.
Escambia	Pensacola.
Franklin	Apalachichola.
Gadsden	Quincy.
Hamilton	Jasper.
Hernando	Brooksville.
Hillsboro	Tampa.
Holmes	Cerro Gordo.
Jackson	Marrianna.
Jefferson	Monticello.
Lafayette	New Troy.
Leon	Tallahassee.
Levy	Bronson.
Liberty	Bristol.
Madison	Madison.
Manitee	Pine Level.
Marion	Ocala.
Monroe	Key West.
Nassau	Fernandina.
Orange	Orlando.
Polk	Bartow
Putnam	Palatka.
St. Johns	St Augustine.
Santa Rosa	Milton.
Sumter	Sumterville.
Suwanee	Live Oak.
Taylor	Perry.
Volusia	Enterprise.
Wakulla	Crawfordville.
Walton	Euchee Anna.
Washington	Vernon.

GEORGIA.

Appling	Baxley.
Baker	Newton.
Baldwin	Milledgeville.
Banks	Homer.
Bartow	Cartersville.
Berrien	Nashville.
Bibb	Macon.
Brooks	Quitman.
Bryan	Bryan.
Bullock	Statesborough.
Burke	Waynesboro'.
Butts	Jackson.
Calhoun	Morgan.
Camden	St. Marys.
Campbell	Fairburn.
Carroll	Carrollton.
Catoosa	Ringgold.
Charlton	Traders Hill.
Chatham	Savannah.
Chattahoochee	Cusseta.
Chattooga	Summerville.
Cherokee	Canton.
Clark	Athens.
Clay	Fort Gaines.
Clayton	Jonesborough.
Clinch	Homerville.
Cobb	Marietta.
Coffee	Douglas.
Colquitt	Moultrie.
Columbia	Appling.
Coweta	Newman.
Crawford	Knoxville.
Dade	Trenton.
Dawson	Dawsonville.
Decatur	Bainbridge.
DeKalb	Decatur.
Dodge	Eastman.
Dooly	Vienna.

County.	County Seat.
Dougherty	Albany.
Douglas	Douglasville.
Early	Blakely.
Echols	Statenville.
Effingham	Springfield.
Elbert	Elberton.
Emanuel	Swainsboro.
Fannin	Morganton.
Fayette	Fayetteville.
Floyd	Rome.
Forsyth	Cumming.
Franklin	Carnesville
Fulton	Atlanta.
Gilmer	Ellijay.
Glasscock	Gibson.
Glynn	Brunswick.
Gordon	Calhoun.
Green	Greensboro.
Gwinnett	Lawrenceville.
Habersham	Clarksville.
Hall	Gainesville.
Hancock	Sparta.
Haralson	Buchanan.
Harris	Hamilton.
Hart	Hartwell.
Heard	Franklin.
Henry	McDonough.
Houston	Perry.
Irwin	Irwinville.
Jackson	Jefferson.
Jasper	Monticello.
Jefferson	Louisville.
Johnson	Wrightsville.
Jones	Clinton.
Laurens	Dublin.
Lee	Leesburgh.
Liberty	Hinesville.
Lincoln	Lincolnton.
Lowndes	Valdosta.
Lumpkin	Dahlonega.
McDuffee	Thomson.
McIntosh	Darien.
Macon	Oglethorpe.
Madison	Danielsville.
Marion	Buena Vista.
Meriwether	Greenville.
Miller	Colquitt.
Milton	Alpharetta.
Mitchell	Camilla.
Monroe	Forsyth.
Montgomery	Mt. Vernon.
Morgan	Madison.
Murray	Spring Place.
Muskogee	Columbus.
Newton	Covington.
Oconee	Watkinsville.
Oglethorpe	Lexington.
Paulding	Dallas.
Pickens	Jasper.
Pierce	Blackshear.
Pike	Zebulon.
Polk	Cedartown.
Pulaski	Hawkinsville.
Putnam	Eastonton.
Quitman	Georgetown.
Rabun	Clayton.
Randolph	Cuthbert.
Richmond	Augusta.
Rockdale	Conyers.
Schley	Ellaville.
Screven	Sylvania.
Spalding	Griffin.
Stewart	Lumpkin.
Sumter	Americus.
Talbot	Talbotton.
Taliaferro	Crawf'rdville.
Tattnall	Reidsville.
Taylor	Butler.
Telfair	McRae.
Terrell	Dawson.
Thomas	Thomasville.
Towns	Hiawassee.
Troup	LaGrange.
Twiggs	Jeffersonville.
Union	Blairsville.
Upson	Thomaston.
Walker	La Fayette.
Walton	Monroe.
Ware	Way Cross.
Warren	Warrenton.
Washington	Sandersville.
Wayne	Waynesville.
Webster	Preston.
White	Cleveland.
Whitfield	Dalton.
Wilcox	Abbeville.
Wilkes	Washington.
Wilkinson	Irwinton.
Worth	Isabella.

IDAHO.

Ada	Boise City.
Alturas	Rocky Bar.
Bear Lake	Paris.
Boise	Idaho City.
Cassia	Albion.
Custer	Challis.
Idaho	Mount Idaho.
Kootenai	Unorganized.
Lemhi	Salmon City.
Nez Perces	Lewiston.
Oneida	Malad City.
Owyhee	Silver City.
Shoshone	Pierce City.
Washington	Weiser.

ILLINOIS.

Adams	Quincy.
Alexander	Cairo.
Bond	Greenville.
Boone	Bellevidere.
Brown	Mt. Sterling.
Bureau	Princeton.
Calhoun	Hardin.
Carroll	Mt. Carroll.
Cass	Virginia.
Champaign	Urbana.
Christian	Taylorsville.
Clark	Marshall.
Clay	Louisville.

County.	*County Seat.*
Clinton	Carlyle.
Coles	Charleston.
Cook	Chicago.
Crawford	Robinson.
Cumberland	Toledo.
DeKalb	Sycamore.
DeWitt	Clinton.
Douglas	Tuscola.
DuPage	Wheaton.
Edgar	Paris.
Edwards	Albion.
Effingham	Effingham.
Fayette	Vandalia.
Ford	Paxton.
Franklin	Benton.
Fulton	Lewistown.
Gallatin	Shawneetown.
Greene	Carrollton.
Grundy	Morris.
Hamilton	McLeansboro'
Hancock	Carthage.
Hardin	Elizabethtown
Henderson	Oquawka.
Henry	Cambridge.
Iroquois	Watseka.
Jackson	Murphysboro'
Jasper	Newton.
Jefferson	Mt. Vernon.
Jersey	Jerseyville.
Jo Daviess	Galena.
Johnson	Vienna.
Kane	Geneva.
Kankakee	Kankakee.
Kendall	Yorkville.
Knox	Galesburgh.
Lake	Waukegan.
LaSalle	Ottawa.
Lawrence	Lawrence.
Lee	Dixon.
Livingston	Pontiac.
Logan	Lincoln.
McDonough	Macomb.
McHenry	Woodstock.
McLean	Bloomington.
Macon	Decatur.
Macoupin	Carlinville.
Madison	Edwardsville.
Marion	Salem.
Marshall	Lacon.
Mason	Decatur.
Massac	Metropolis C'y
Menard	Petersburgh.
Mercer	Aledo.
Monroe	Waterloo.
Montgomery	Hillsborough.
Morgan	Jacksonville.
Moultrie	Sullivan.
Ogle	Oregon.
Peoria	Peoria.
Perry	Pinckneyville.
Piatt	Monticello.
Pike	Pittsfield.
Pope	Golconda.
Pulaski	Mound City.
Putnam	Hennipin.
Randolph	Chester
Richland	Olney.
Rock Island	Rock Island.
St. Clair	Belleville.
Saline	Harrisburgh.
Sangamon	Springfield.
Schuyler	Rushville.
Scott	Winchester.
Shelby	Shelbyville.
Stark	Toulon.
Stephenson	Freeport.
Tazewell	Pekin.
Union	Jonesborough
Vermillion	Danville.
Wabash	Mount Carmel
Warren	Monmouth.
Washington	Nashville.
Wayne	Fairfield.
White	Carmi.
Whitesides	Morrison.
Will	Joliet.
Williamson	Marion.
Winnebago	Rockford.
Woodford	Metamora.

INDIANA.

Adams	Decatur.
Allen	Fort Wayne.
Bartholomew	Columbus
Benton	Fowler.
Blackford	Hartford City.
Boone	Lebanon.
Brown	Nashville.
Carroll	Delphi.
Cass	Logansport.
Clark	Jeffersonville.
Clay	Brazil.
Clinton	Frankfort.
Crawford	Leavenworth.
Davies	Washington.
Dearborn	Lawrenceburgh.
Decatur	Greensburgh.
DeKalb	Auburn.
Delaware	Muncie.
Dubois	Jasper.
Elkhart	Goshen.
Fayette	Connersville.
Floyd	New Albany.
Fountain	Covington.
Franklin	Brookville.
Fulton	Rochester.
Gibson	Princeton.
Grant	Marion.
Greene	Bloomfield.
Hamilton	Noblesville.
Hancock	Greenfield.
Harrison	Corydon.
Hendricks	Danville.
Henry	New Castle
Howard	Kokomo.
Huntington	Huntington.
Jackson	Brownstown.
Jasper	Rensselaer.
Jay	Portland.
Jefferson	Madison.
Jennings	Vernon.

County.	*County Seat.*
Johnson	Franklin.
Knox	Vincennes.
Kosciusko	Warsaw.
Lagrange	Lagrange.
Lake	Crown Point.
LaPorte	LaPorte.
Lawrence	Bedford.
Madison	Anderson.
Marion	Indianapolis.
Marshall	Plymouth.
Martin	Shoals.
Miami	Peru.
Monroe	Bloomington.
Montgomery	Crawfordsville
Morgan	Martinsville.
Newton	Kent.
Noble	Albion.
Ohio	Rising Sun.
Orange	Paoli.
Owen	Spencer.
Parke	Rockville.
Perry	Cannelton.
Pike	Petersburgh.
Porter	Valparaiso.
Posey	Mt. Vernon.
Pulaski	Winamac.
Putnam	Green Castle.
Randolph	Winchester.
Ripley	Versailles.
Rush	Rushville.
St. Joseph	South Bend.
Scott	Scottsburgh.
Shelby	Shelbyville.
Spencer	Rockport.
Starke	Knox.
Steuben	Angola.
Sullivan	Sullivan.
Switzerland	Vevay.
Tippecanoe	La Fayette.
Tipton	Tipton.
Union	Liberty.
Vanderburgh	Evansville.
Vermillion	Newport.
Vigo	Terre Haute.
Wabash	Wabash.
Warren	Williamsport.
Warrick	Booneville.
Washington	Salem.
Wayne	Richmond.
Wells	Bluffton.
White	Monticello.
Whitley	Columbia Ci'y.

INDIAN TERRITORY.

Reservations.
Atoka.
Cherokee — Tahlequah.
Choctaw.
Creek.
Chickasaw.
Cheyenne and Arapahoe.
Kiowa, Comanche and Apache.
Kansas.
Modoc.
Nez Perces.
Osage.
Otoe and Missouri.
Ottawa.
Ponca.
Pottawatomie.
Pawnee.
Peoria and Wea.
Pickens.
Quapaw.
Skullyville.
Shawnee.
Seminole.
Seneca.
Sac and Fox.
Sugar Loaf.
Upper Arkansas.
Wyandotte.
Wichita.

IOWA.

County.	*County Seat.*
Adair	Greenfield.
Adams	Corning.
Allamakee	Waukon.
Appanoose	Centerville.
Audubon	Audubon.
Benton	Vinton.
Black Hawk	Waterloo.
Boone	Boonesbor'gh.
Bremer	Waverly.
Buchanan	Independence.
Buena Vista	Storm Lake.
Butler	Allison.
Calhoun	Rockwell City.
Carroll	Carroll City.
Cass	Atlantic.
Cedar	Tipton.
Cerro Gordo	Mason City
Cherokee	Cherokee.
Cickasaw	New Hampt'n.
Clarke	Osceolo.
Clay	Spencer.
Clayton	Elkader.
Clinton	Clinton.
Crawford	Denison
Dallas	Adel.
Davis	Bloomfield.
Decatur	Leon.
Delaware	Manchester.
Des Moines	Burlington.
Dickinson	Spirit Lake.
Dubuque	Dubuque.
Emmet	Swan Lake Cty
Fayette	West Union.
Floyd	Charles City.
Franklin	Hampton.
Fremont	Sidney.
Greene	Jefferson.
Grundy	Grundy Center.
Guthrie	Guthrie Center.
Hamilton	Webster City.
Hancock	Concord.
Hardin	Eldora.
Harrison	Logan.
Henry	Mt. Pleasant.

County.	*County Seat.*
Howard	Cresco.
Humboldt	Dakota.
Ida	Ida Grove.
Iowa	Marengo.
Jackson	Maquoketa
Jasper	Newton.
Jefferson	Fairfield.
Johnson	Iowa City.
Jones	Anamosa.
Keokuk	Sigourney.
Kossuth	Algona.
Lee	Fort Madison.
Linn	Marion.
Louisa	Wapello.
Lucas	Chariton.
Lyon	Rock Rapids.
Madison	Winterset.
Mahaska	Oskaloosa.
Marion	Knoxville.
Marshall	Marshalltown.
Mills	Glenwood.
Mitchell	Osage.
Monona	Onawa City.
Monroe	Albia.
Montgomery	Red Oaks.
Muscatine	Muscatine.
O'Brien	Primghar.
Osceola	Sibley.
Page	Clarinda.
Palo Alto	Emmetsburgh
Plymouth	Le Mars.
Pocahontas	Pocahontas.
Polk	Des Moines.
Pottawatomie	Council Bluffs.
Poweshiek	Montezuma.
Ringgold	Mount Ayr.
Sac	Sac City.
Scott	Davenport.
Shelby	Harlan.
Sioux	Orange City.
Story	Nevada.
Tama	Toledo.
Taylor	Bedford.
Union	Afton.
Van Buren	Keosauqua
Wapello	Ottumwa.
Warren	Indianola.
Washington	Washington.
Wayne	Corydon.
Webster	Fort Dodge.
Winnebago	Forest City.
Winneshiek	Decorah.
Woodbury	Sioux City.
Worth	Northwood.
Wright	Clarion.

KANSAS.

County.	*County Seat.*
Allen	Iola.
Anderson	Garnett.
Atchison	Atchison.
Barbour	Medicine Lodge.
Barton	Great Bend.
Bourbon	Fort Scott.
Brown	Hiawatha.
Butler	Eldorado.
Chase	Cottonwood Falls.
Chautauqua	Sedan.
Cherokee	Columbus.
Cheyenne	Unorganized.
Clay	Clay Centre.
Cloud	Concordia.
Coffey	Burlington.
Comanche	Unorganized.
Cowley	Winfield.
Crawford	Girard.
Davis	Junction City.
Decatur	Oberlin.
Dickinson	Abilene.
Doniphan	Troy.
Douglas	Lawrence.
Edwards	Kinsley.
Elk	Howard.
Ellis	Hays City.
Ellsworth	Ellsworth.
Finney	Unorganized.
Ford	Dodge City.
Franklin	Ottawa.
Gove	Unorganized.
Graham	Millbrook.
Greeley	Unorganized.
Greenwood	Eureka.
Hamilton	Unorganized.
Harper	Anthony.
Harvey	Newton.
Hodgeman	Buckner.
Jackson	Holten.
Jefferson	Oscaloosa.
Jewell	Mankato.
Johnson	Olathe.
Kingman	Kingman.
Labette	Oswego.
Lane	Unorganized.
Leavenworth	Leavenworth.
Lincoln	Lincoln.
Linn	Mound City.
Lyon	Emporia.
McPherson	McPherson.
Marion	Marion.
Marshall	Marysville.
Miami	Paola.
Mitchell	Beloit.
Montgomery	Independence.
Morris	Council Grove.
Nemaha	Seneca.
Neosho	Erie.
Ness	Ness City.
Norton	Norton.
Osage	Lyndon.
Osborne	Osborne.
Ottawa	Minneapolis.
Pawnee	Larned.
Phillips	Phillipsburg.
Pottawatomie	Westmoreland.
Pratt	Iuka.
Rawlins	Atwood.
Reno	Hutchison.
Republic	Belleville.
Rice	Lyons.
Riley	Manhattan.
Rooks	Stockton.
Rush	Rush Center.

County.	County Seat.
Russell	Russell.
St. John	Unorganized.
Saline	Salina.
Scott	Unorganized.
Sedgwick	Wichita.
Seward	Unorganized.
Shawnee	Topeka.
Sheridan	Kenneth.
Sherman	Unorganized.
Smith	Smith Center.
Stafford	St. John.
Sumner	Wellington.
Thomas	Unorganized.
Trego	Wa Keeney.
Wabaunsee	Alma.
Wallace	Wallace.
Washington	Washington.
Wichita	Unorganized.
Wilson	Fredonia.
Woodson	Yates' Center.
Wyandotte	Wyandotte.

KENTUCKY.

Adair	Columbia.
Allen	Scottsville.
Anderson	Lawrenceburgh.
Ballard	Blandville.
Barren	Glasgow.
Bath	Owingsville
Bell	Pineville.
Boone	Burlington.
Bourbon	Paris.
Boyd	Catlettsburgh.
Boyle	Danville.
Bracken	Brookville.
Breathitt	Jackson.
Breckinridge	Hardinsburgh.
Bullitt	Shepherdsville
Butler	Morgantown.
Caldwell	Princeton.
Calloway	Murray.
Campbell	Newport.
Carroll	Carrollton.
Carter	Grayson.
Casey	Liberty.
Christian	Hopkinsville.
Clark	Winchester.
Clay	Manchester.
Clinton	Albany.
Crittenden	Marion.
Cumberland	Burksville.
Daviess	Owensboro.
Edmonson	Brownsville.
Elliott	Sandy Hook.
Estill	Irvine.
Fayette	Lexington.
Fleming	Flemingsburgh.
Floyd	Prestonburgh.
Franklin	Frankfort.
Fulton	Hickman.
Gallatin	Warsaw.
Garrard	Lancaster.
Grant	Williamstown.
Graves	Mayfield.
Grayson	Leitchfield.

County.	County Seat
Green	Greensburgh.
Greenup	Greenup.
Hancock	Hawesville.
Hardin	Elizabethtown.
Harlan	Harlan.
Harrison	Cynthiana.
Hart	Munfordville
Henderson	Henderson.
Henry	New Castle.
Hickman	Clinton.
Hopkins	Madisonville.
Jackson	McKee.
Jefferson	Louisville.
Jessamine	Nicholasville.
Johnson	Paintsville.
Josh Bell	——.
Kenton	Covington.
Knox	Barboursville.
La Rue	Hodgensville.
Laurel	London.
Lawrence	Louisa.
Lee	Beattyville.
Leslie	Hyden.
Letcher	Whitesburgh.
Lewis	Vanceburgh.
Lincoln	Stanford.
Livingston	Smithland.
Logan	Russellville.
Lyon	Eddyville.
McCracken	Paducah.
McLean	Calhoun.
Madison	Richmond.
Magoffin	Salyersville.
Marion	Lebanon.
Marshall	Benton.
Martin	Warfield.
Mason	Maysville.
Meade	Bradenburgh.
Menifee	Frenchburgh.
Mercer	Harrodsb'rgh.
Metcalfe	Edmonton.
Monroe	Thompkinsville.
Montgomery	Mt. Sterling.
Morgan	West Liberty.
Muhlenburgh	Greenville.
Nelson	Bardstown.
Nicholas	Carlisle.
Ohio	Hartford.
Oldham	Lagrange.
Owen	Owenton.
Owsley	Booneville.
Pendleton	Falmouth.
Perry	Hazard.
Pike	Pikeville.
Powell	Stanton.
Pulaski	Somerset.
Robertson	Mount Olivet.
Rockcastle	Mt. Vernon.
Rowan	Moorehead.
Russell	Jamestown.
Scott	Georgetown.
Shelby	Shelbyville.
Simpson	Franklin.
Spencer	Taylorsville.
Taylor	Campbellsville.
Todd	Elkton.

County.	County Seat.
Trigg	Cadiz.
Trimble	Bedford.
Union	Morganfield.
Warren	Bowling Green.
Washington	Springfield.
Wayne	Monticello.
Webster	Dixon.
Whitley	Whitley.
Wolfe	Campton.
Woodford	Versailles.

LOUISIANA.

Ascension	Donaldsonville.
Assumption	Napoleonville.
Avoyelles	Marksville.
Bienville	Sparta.
Bossier	Bellevue.
Caddo	Shreveport.
Calcasieu	Lake Charles.
Caldwell	Columbia.
Cameron	Cameron.
Catahoula	Harrisonburgh.
Claiborne	Homer.
Concordia	Vidalia.
De Soto	Mansfield.
E. Baton Rouge	Baton Rouge.
East Carroll	Lake Providence.
East Feliciana	Clinton.
Franklin	Winnsboro.
Grant	Colfax.
Iberia	New Iberia.
Iberville	Plaquemine.
Jackson	Vernon.
Jefferson	Gretna.
La Fayette	Vermillionville.
La Fourche	Thibodeaux.
Lincoln	Vienna.
Livingston	Port Vincent.
Madison	Delta.
Moorehouse	Bastrop.
Natchitoches	Natchitoches.
Orleans	New Orleans.
Ouachita	Monroe.
Plaquemines	Point La Hache.
Point Coupee	New Roads.
Rapides	Alexandria.
Red River	Coushatta Chute.
Richland	Rayville.
Sabine	Many.
Saint Bernard	St. Bernard.
Saint Charles	Hahnville.
Saint Helena	Greensburgh.
Saint James	Convent.
St. John Baptist	Edgard.
Saint Landry	Opelousas.
Saint Martin	St. Martinsville.
Saint Marys	Franklin.
Saint Tammany	Covington.
Tangipahoa	Amite City.
Tensas	St. Joseph.
Terre Bonne	Houma.
Union	Farmersville.
Vermillion	Abbeville.
Vernon	Leesville.
Washington	Franklinton.
Webster	Minden.
West Baton Rge.	Port Allen.
West Carroll	Floyd.
West Feliciana	Bayou Sara.
Winn	Winfield.

MAINE.

Androscoggin	Auburn.
Aroostook	Houlton.
Cumberland	Portland.
Franklin	Farmington.
Hancock	Ellsworth.
Kennebec	Augusta.
Knox	Rockland.
Lincoln	Wiscasset.
Oxford	Paris.
Penobscot	Bangor.
Piscataquis	Dover.
Sagadahoc	Brunswick.
Somerset	Skowhegan.
Waldo	Belfast.
Washington	Machias.
York	Alfred.

MARYLAND.

Alleghany	Cumberland.
Anne Arundel	Annapolis.
Baltimore	Towson.
Calvert	Prince Fredericktown.
Caroline	Denton.
Carroll	Westminster.
Cecil	Elkton.
Charles	Port Tobacco.
Dorchester	Cambridge.
Frederick	Frederick.
Garret	Oakland.
Harford	Bel Air.
Howard	Ellicott City.
Kent	Chestertown.
Montgomery	Rockville.
Prince Georges.	Up. Marlbor'gh.
Queen Anne	Centreville.
St. Marys	Leonardtown.
Somerset	Princess Anne.
Talbot	Easton.
Washington	Hagerstown.
Wicomico	Salisbury.
Worcester	Snow Hill.

MASSACHUSETTS.

Barnstable	Barnstable.
Berkshire	Pittsfield.
Bristol	New Bedford.
Dukes	Edgartown.
Essex	Lawrence.
Franklin	Greenfield.
Hampden	Springfield.
Hampshire	N. Hampton.
Middlesex	Lowell.
Nantucket	Nantucket.
Norfolk	Dedham.
Plymouth	Plymouth.

County.	*County Seat.*
Suffolk	Boston.
Worcester	Worcester.

MICHIGAN.

Alcona	Harrisville.
Allegan	Allegan.
Alpena	Alpena.
Antrim	Bellaire.
Arenac	———.
Baraga	L'Anse.
Barry	Hasting.
Bay	Bay City.
Benzie	Benzonia.
Berrien	Berrien Springs.
Branch	Coldwater.
Calhoun	Marshall.
Cass	Cassopolis.
Charlevoix	Charlevoix.
Cheboygan	Cheboygan.
Chippewa	Sault Ste Marie.
Clare	Harrison.
Clinton	St. John.
Crawford	Grayling.
Delta	Escanaba.
Eaton	Charlotte
Emmet	Harbour Springs.
Genesee	Flint.
Gladwin	Gladwin.
Grand Traverse	Traverse City.
Gratiot	Ithaca.
Hillsdale	Hillsdale.
Houghton	Houghton.
Huron	Bad Axe.
Ingham	Mason.
Ionia	Ionia.
Iosco	Tawas City.
Isabella	Mt. Pleasant.
Isle Royale	———.
Jackson	Jackson.
Kalamazoo	Kalamazoo.
Kalkaska	Kalkaska.
Kent	Grand Rapids.
Keweenaw	Eagle River.
Lake	Baldwin.
Lapeer	Lapeer.
Leleenaw	Leland.
Lenawee	Adrian.
Livingston	Howell.
Mackinac	St. Ignace.
Macomb	Mt. Clemens.
Manistee	Manistee.
Manitou	St. James.
Marquette	Marquette.
Mason	Ludington.
Mecosta	Big Rapids.
Menominee	Menominee.
Midland	Midland.
Missaukee	Lake City.
Monroe	Monroe.
Montcalm	Stanton.
Montmorency	Hillman.
Muskegon	Muskegon.
Newaygo	Newaygo.
Oakland	Pontiac.
Oceana	Hart.
Ogemaw	West Branch.
Ontonagon	Ontonagon.
Osceola	Hersey.
Oscoda	Unorganized.
Otsego	Gaylord.
Ottawa	Grand Haven.
Presque Isle	Rogers City.
Roscommon	Roscommon.
Saginaw	Saginaw.
St. Clair	Port Huron.
St. Joseph	Centerville.
Sanilac	Sandusky.
Schoolcraft	Manistique.
Shiawassee	Corunna.
Tuscola	Caro.
Van Buren	Paw Paw.
Washtenaw	Ann Arbor.
Wayne	Detroit.
Wexford	Cadillac.

MINNESOTA.

Aitkin	Aitkin.
Anoka	Anoka.
Becker	Detroit City.
Beltrami	Unorganized.
Benton	Sauk Rapids.
Big Stone	Ortonville.
Blue Earth	Mankato.
Brown	New Ulm.
Carlton	Thomson.
Carver	Chaska.
Cass	Unorganized.
Chippewa	Montevideo.
Chicago	Center City.
Clay	Moorhead.
Cook	Unorganized.
Cottonwood	Windom.
Crow Wing	Brainard.
Dakota	Hastings.
Dodge	Mantorville.
Douglas	Alexandria.
Faribault	Blue Earth City.
Fillmore	Preston.
Freeborn	Albert Lea
Goodhue	Red Wing.
Grant	Elbow Lake.
Hennepin	Minneapolis.
Houston	Caledonia.
Hubbard	Park Rapids.
Isanta	Cambridge.
Itasca	Unorganized.
Jackson	Jackson.
Kanabec	Mora.
Kandiyohi	Willmar.
Kittson	Hallock.
Lac-Qui-Parle	Lac-Qui-Parle.
Lake	Beaver Bay.
Le Suer	Le Suer Center.
Lincoln	Lake Benton.
Lyon	Marshall.
Marshall	Warren.
Martin	Fairmont.
McLeod	Glencoe.
Meeker	Litchfield.
Mille Lacs	Princeton.

County.	*County Seat.*
Morrison	Little Falls.
Mower	Austin.
Murray	Currie.
Nicollet	St. Peter.
Nobles	Worthington.
Norman	Ada.
Olmsted	Rochester.
Otter Tail	Fergus Falls.
Pine	Pine City.
Pipe Stone	Pipe Stone.
Polk	Crookston.
Pope	Glenwood.
Ramsey	St. Paul.
Redwood	Redwood Falls.
Renville	Beaver Falls.
Rice	Faribault.
Rock	Luverne.
St. Louis	Duluth.
Scott	Shakopee.
Sherburne	Elk River.
Sibley	Henderson.
Stearns	St. Cloud.
Steele	Owatonna.
Stevens	Morris.
Swift	Benson.
Todd	Long Prairie.
Traverse	Brown's Valley.
Wabasha	Wabasha.
Wadena	Wadena.
Waseca	Waseca.
Washington	Stillwater.
Watonwan	St. James.
White Earth	Indian Res'rvat'n.
Wilkin	Breckenridge.
Winona	Winona.
Wright	Buffalo.
Yellow Medicine	Granite Falls.

MISSISSIPPI.

Adams	Natches.
Alcorn	Corinth.
Amite	Liberty.
Attala	Kosciusko.
Benton	Ashland.
Bollivar	Rosedale.
Calhoun	Pittsborough.
Carroll	Carrollton.
Chickasaw	Houston.
Choctaw	Chester.
Claiborne	Port Gibson.
Clarke	Quitman.
Clay	West Point.
Coahoma	Friar's Point.
Copiah	Hazelhurst.
Covington	Williamsburg.
De Sota	Hernando.
Franklin	Meadville.
Greene	Leakesville.
Grenada	Grenada.
Hancock	Bay St. Louis.
Harrison	Mississippi City.
Hinds	Jackson.
Holmes	Lexington.
Issaquena	Mayorsville.
Itawamba	Fulton.

County.	*County Seat.*
Jackson	Scranton.
Jasper	Paulding.
Jefferson	Fayette.
Jones	Ellisville.
Kemper	DeKalb.
Lafayette	Oxford.
Lauderdale	Meridian.
Lawrence	Monticello.
Leake	Carthage.
Lee	Tupelo.
Le Flore	Greenwood.
Lincoln	Brookhaven.
Lowndes	Columbus.
Madison	Canton.
Marion	Columbia.
Marshall	Holly Springs.
Monroe	Aberdeen.
Montgomery	Winona.
Neshoba	Philadelphia.
Newton	Decatur.
Noxubee	Macon.
Oktibbeha	Starkville.
Panola	Sardis.
Perry	Augusta.
Pike	Magnolia.
Pontotoc	Pontotoc.
Prentiss	Booneville.
Quitman	Belen.
Rankin	Brandon.
Scott	Forest.
Sharkey	Rolling Forks.
Simpson	Westville.
Smith	Raleigh.
Sunflower	Johnsonville.
Tallahatchie	Charleston.
Tate	Senatobia.
Tippah	Ripley.
Tishomingo	Iuka.
Tunica	Austin.
Union	New Albany.
Warren	Vicksburg.
Washington	Greenville.
Wayne	Waynesborough.
Webster	Walthal.
Wilkinson	Woodville.
Winston	Louisville.
Yalobusha	Coffeeville.
Yazoo	Yazoo City.

MISSOURI.

Adair	Kirksville.
Andrew	Savannah.
Atchison	Rockport.
Audrain	Mexico.
Barry	Cassville.
Barton	Lamar.
Bates	Butler.
Benton	Warsaw.
Bollinger,	Marble Hill.
Boone	Columbia.
Buchanan	St. Joseph.
Butler	Poplar Bluff.
Caldwell	Kingston.
Callaway	Fulton.
Camden	Linn Creek.

County.	County Seat.
Cape Girardeau	Jackson.
Carroll	Carrollton.
Carter	Van Buren.
Cass	Harrisonville.
Cedar	Stockton.
Chariton	Keytesville.
Christian	Ozark.
Clarke	Kahoka.
Clay	Liberty.
Clinton	Plattsburg.
Cole	Jefferson City.
Cooper	Booneville.
Crawford	Steelville.
Dade	Greenfield.
Dallas	Buffalo.
Daviess	Gallatin.
DeKalb	Maysville.
Dent	Salem.
Douglas	Ava.
Dunklin	Kennett.
Franklin	Union.
Gasconade	Hermann.
Gentry	Albany.
Greene	Springfield.
Grundy	Trenton.
Harrison	Bethany.
Henry	Clinton.
Hickory	Hermitage.
Holt	Oregon.
Howard	Fayette.
Howell	West Plains.
Iron	Ironton.
Jackson	Independence.
Jasper	Carthage.
Jefferson	Hillsborough.
Johnson	Warrensburg.
Knox	Edina.
Laclede	Lebanon.
Lafayette	Lexington.
Lawrence	Mt. Vernon.
Lewis	Monticello.
Lincoln	Troy.
Linn	Linneus.
Livingston	Chillicothe.
McDonald	Pineville.
Macon	Macon City.
Madison	Fredericktown.
Maries	Vienna.
Marion	Palmyra.
Mercer	Princeton.
Miller	Tuscumbia.
Mississippi	Charleston.
Moniteau	California.
Monroe	Paris.
Montgomery	Danville.
Morgan	Versailles.
New Madrid	New Madrid.
Newton	Neosho.
Nodaway	Marysville.
Oregon	Alton.
Osage	Linn.
Ozark	Gainesville.
Pemiscot	Gayoso.
Perry	Perryville.
Pettis	Sedalia.
Phelps	Rolla.
Pike	Bowling Green.
Platte	Platte City.
Polk	Bolivar.
Pulaski	Waynesville.
Putnam	Unionville.
Ralls	New London.
Randolph	Huntsville.
Ray	Richmond.
Reynolds	Centreville.
Ripley	Doniphan.
St. Charles	St. Charles.
St. Clair	Oscetla.
St. Francois	Farmington.
St. Genevieve	St. Genevieve.
St. Louis	St. Louis.
Saline	Marshall.
Schuyler	Lancaster.
Scotland	Memphis.
Scott	Benton.
Shannon	Eminence.
Shelby	Shelbyville.
Stoddard	Bloomfield.
Stone	Galena.
Sullivan	Milan.
Taney	Forsyth.
Texas	Houston.
Vernon	Nevada.
Warren	Warrenton.
Washington	Potosi.
Wayne	Greenville.
Webster	Marshfield.
Worth	Grant City.
Wright	Hartville.

MONTANA.

Beaver Head	Dillon.
Choteau	Fort Benton.
Custer	Miles City.
Dawson	Unorganized.
Deer Lodge	Deer Lodge C'y.
Gallatin	Bozeman.
Jefferson	Radersburgh.
Lewis & Clarke	Helena.
Madison	Virginia City.
Meagher	White Sulphur Spgs.
Missoula	Missoula.
Silver Bow	Butte City.
Yellowstone	Billings.

NEBRASKA.

Adams	Hastings.
Antelope	Oakdale.
Boone	Albion.
Brown	Unorganized.
Buffalo	Kearney.
Burt	Tekamah.
Butler	David City.
Cass	Plattsmouth.
Cedar	St. Helena.
Chase	Unorganized.
Cherry	Valentine.
Cheyenne	Sidney.
Clay	Clay Centre.
Colfax	Schuyler.

County.	*County Seat.*
Cuming	West Point.
Custer	Custer.
Dakota	Dakota.
Dawson	Plumb Creek.
Dixon	Ponca.
Dodge	Fremont.
Douglas	Omaha.
Dundy	Unorganized.
Fillmore	Geneva.
Franklin	Bloomington.
Frontier	Stockville.
Furnas	Beaver City.
Gage	Beatrice.
Gosper	Davisville.
Greeley	Scotia.
Hall	Grand Island.
Hamilton	Aurora.
Harlan	Alma.
Hayes	Unorganized.
Hitchcock	Culbertson.
Holt	O'Neill.
Howard	St. Paul.
Jefferson	Fairbury.
Johnson	Tecumseh.
Kearney	Minden.
Keith	Ogallalla.
Keya Paha	Spring View.
Knox	Niobrara.
Lancaster	Lincoln.
Lincoln	North Platte.
Loup	Unorganized.
Madison	Madison.
Merrick	Central City.
Nance	Fullerton.
Nemaha	Brownville.
Nuckolls	Nelson.
Omaha Reservation.	
Otoe	Nebraska City.
Pawnee	Pawnee City.
Phelps	Phelps.
Pierce	Pierce.
Platte	Columbus.
Polk	Osceola.
Red Willow	Indianola.
Richardson	Falls City.
Saline	Wilber.
Sarpy	Papillion.
Saunders	Wahoo.
Seward	Seward.
Sherman	Loup City.
Sioux	Unorganized.
Stanton	Stanton.
Thayer	Hebron.
Valley	Ord.
Washington	Blair.
Wayne	La Porte.
Webster	Red Cloud.
Wheeler	Willow Spr'gs.
York	York.
Unorganized Territory.	

NEVADA.

Churchill	Stillwater.
Douglas	Genoa.
Elko	Elko.
Esmeralda	Aurora.
Eureka	Eureka.
Humboldt	Winnemucca.
Lander	Austin.
Lincoln	Pioche.
Lyon	Dayton.
Nye	Belmont.
Ormsby	Carson City.
Roop	Unorganized.
Storey	Virginia City.
Washoe	Reno.
White Pine	Hamilton.

NEW HAMPSHIRE.

Belknap	Laconia.
Carroll	Ossipee.
Cheshire	Keene.
Coos	Lancaster.
Grafton	Haverhill.
Hillsborough	Nashua.
Merrimack	Concord.
Rockingham	Exeter.
Strafford	Dover.
Sullivan	Newport.

NEW JERSEY.

Atlantic	Mays Landing.
Bergen	Hackensack.
Burlington	Mt. Holly.
Camden	Camden.
Cape May	Cape May.
Cumberland	Bridgeton.
Essex	Newark.
Gloucester	Woodbury.
Hudson	Jersey City.
Hunterdon	Flemington.
Mercer	Trenton.
Middlesex	New Brunswick.
Monmouth	Freehold.
Morris	Morristown.
Ocean	Toms River.
Passaic	Paterson.
Salem	Salem.
Somerset	Somerville.
Sussex	Newton.
Union	Elizabeth.
Warren	Belvidere.

NEW MEXICO.

Bernalillo	Bernalillo.
Colfax	Cimarron.
Dona Ana	Mesilla.
Grant	Silver City
Lincoln	Lincoln.
Mora	Mora.
Rio Arriba	Tierra Amerilla.
San Miguel	Las Vegas.
Santa Fe	Santa Fe.
Socorro	Socorro.
Taos	Fernandes De Taos.
Valencia	Los Lumas.

NEW YORK.

Albany	Albany.
Allegany	Belmont.

County.	County Seat.
Broome	Binghamton.
Cattaraugus	Little Valley.
Cayuga	Auburn.
Chautauqua	Mayville.
Chemung	Elmira.
Chenango	Norwich.
Clinton	Plattsburgh.
Columbia	Hudson.
Cortland	Cortland.
Delaware	Delhi.
Dutchess	Poughkeepsie.
Erie	Buffalo.
Essex	Elizabethtown.
Franklin	Malone.
Fulton	Johnstown.
Genesee	Batavia.
Greene	Catskill.
Hamilton	Sageville.
Herkimer	Herkimer.
Jefferson	Watertown.
Kings	Brooklyn.
Lewis	Lowville.
Livingston	Geneseo.
Madison	Morrisville.
Monroe	Rochester.
Montgomery	Fonda.
New York	New York.
Niagara	Lockport.
Oneida	Utica.
Onondaga	Syracuse.
Ontario	Canandaigua.
Orange	Goshen.
Orleans	Albion.
Oswego	Oswego.
Otsego	Cooperstown.
Putnam	Carmel.
Queens	Jamaica.
Rensselaer	Troy.
Richmond	Richmond.
Rockland	New City.
St. Lawrence	Canton.
Saratoga	Ballston.
Schenectady	Schenectady.
Schoharie	Schoharie.
Schuyler	Watkins.
Seneca	Ovid.
Steuben	Corning.
Suffolk	Riverhead.
Sullivan	Monticello.
Tioga	Owego.
Tompkins	Ithaca.
Ulster	Kingston.
Warren	Lake George.
Washington	Argyle.
Wayne	Lyons.
Westchester	White Plains.
Wyoming	Warsaw.
Yates	Pen Yan.

NORTH CAROLINA.

County.	County Seat.
Alamance	Graham.
Alexander	Taylorsville.
Alleghany	Sparta.
Anson	Wadesborough.
Ashe	Jefferson.
Beaufort	Washington.
Bertie	Windsor.
Bladen	Elizabethtown.
Brunswick	Smithville.
Buncombe	Ashville.
Burke	Morgantown.
Cabarrus	Concord.
Caldwell	Lenoir.
Camden	Camden.
Cartaret	Beaufort.
Caswell	Yanceyville.
Catawba	Newton.
Chatham	Pittsborough.
Cherokee	Murphy.
Chowan	Edenton.
Clay	Hayesville.
Cleveland	Shelby.
Columbus	Whiteville.
Craven	New Berne.
Cumberland	Fayetteville.
Currituck	Currituck.
Dare	Manteo.
Davidson	Lexington.
Davie	Mocksville.
Duplin	Kenansville.
Durham	Durham.
Edgecomb	Tarborough.
Forsyth	Winston.
Franklin	Louisburgh.
Gaston	Dallas.
Gates	Gatesville.
Graham	Robinsville.
Granville	Oxford.
Greene	Snow Hill.
Guilford	Greensborough.
Halifax	Halifax.
Harnett	Linnington.
Haywood	Waynesville.
Henderson	Hendersonville.
Hertford	Winton.
Hyde	Swan Quarter.
Iredell	Statesville.
Jackson	Webster.
Johnston	Smithfield.
Jones	Trenton.
Lenoir	Kinston.
Lincoln	Lincolnton.
McDowell	Marion.
Macon	Franklin.
Madison	Marshall.
Martin	Williamstown.
Mecklenburgh	Charlotte.
Mitchell	Bakersville.
Montgomery	Troy.
Moore	Carthage.
Nash	Nashville.
New Hanover	Wilmington.
Northampton	Jackson.
Onslow	Jacksonville.
Orange	Hillsborough.
Pamlico	Stonewall.
Pasquotank	Elizabeth City.
Pender	Burgaw.
Perquimans	Hertford.
Person	Roxborough.
Pitt	Greenville.

County.	*County Seat.*
Polk	Columbus.
Randolph	Ashborough.
Richmond	Rockingham.
Robeson	Lumberton.
Rockingham	Wentworth.
Rowan	Salisbury.
Rutherford	Rutherfordstown.
Sampson	Clinton
Stanley	Albemarle.
Stokes	Danbury.
Surry	Dobson.
Swain	Charleston.
Transylvania	Brevard
Tyrrell	Columbia.
Union	Monroe.
Vance	Henderson.
Wake	Raleigh.
Warren	Warrenton.
Washington	Plymouth.
Watauga	Boone.
Wayne	Goldsborough.
Wilkes	Wilkesburgh.
Wilson	Wilson.
Yadkin	Yadkinville.
Yancy	Burnsville.

OHIO.

Adams	West Union.
Allen	Lima.
Ashland	Ashland.
Ashtabula	Jefferson.
Athens	Athens.
Auglaize	Wapakoneta.
Belmont	St. Clairsville.
Brown	Georgetown.
Butler	Hamilton.
Carroll	Carrollton.
Champaign	Urbana.
Clarke	Springfield.
Clermont	Batavia.
Clinton	Wilmington.
Columbiana	New Lisbon.
Coshocton	Coshocton.
Crawford	Bucyrus.
Cuyahoga	Cleveland.
Darke	Greenville.
Defiance	Defiance.
Delaware	Delaware.
Erie	Sandusky.
Fairfield	Lancaster.
Fayette	Washington.
Franklin	Columbus.
Fulton	Wauseon.
Gallia	Gallipolis.
Geauga	Chardon.
Greene	Xenia
Guernsey	Cambridge.
Hamilton	Cincinnati.
Hancock	Findlay.
Hardin	Kenton.
Harrison	Cadiz.
Henry	Napoleon.
Highland	Hillsborough.
Hocking	Logan.
Holmes	Millersburgh.
Huron	Norwalk.
Jackson	Jackson.
Jefferson	Steubenville.
Knox	Mt. Vernon.
Lake	Painesville.
Lawrence	Ironton.
Licking	Newark.
Logan	Bellefontaine.
Lorain	Elyria.
Lucas	Toledo.
Madison	London.
Mahoning	Youngstown.
Marion	Marion.
Medina	Medina.
Meigs	Pomeroy.
Mercer	Celina.
Miami	Troy.
Monroe	Woodsfield.
Montgomery	Dayton.
Morgan	McConnells.
Morrow	Mt. Gilead.
Muskingum	Zanesville.
Noble	Caldwell.
Ottawa	Port Clinton.
Paulding	Paulding.
Perry	New Lexingt'n
Pickaway	Circleville.
Pike	Waverly.
Portage	Ravenna.
Preble	Eaton.
Putnam	Ottawa.
Richland	Mansfield.
Ross	Chillicothe.
Sandusky	Fremont.
Scioto	Portsmouth.
Seneca	Tiffin.
Shelby	Sidney.
Stark	Canton.
Summit	Akron.
Trumbull	Warren.
Tuscarawas	New Philadelphia.
Union	Marysville.
Van Wert	Van Wert.
Vinton	McArthur.
War en	Lebanon.
Washington	Marietta.
Wayne	Wooster.
Williams	Bryan.
Wood	BowlingGreen
Wyandot	Upper Sandusky.

OREGON.

Baker	Baker City.
Benton	Corvallis.
Clackamas	Oregon City.
Clatsop	Astoria.
Columbia	St. Helen.
Coos	Empire City.
Crook	Prineville.
Curry	Ellensburgh.
Douglas	Roseburgh.
Grant	Canyon City.
Jackson	Jacksonville.
Josephine	Kerby.
Klamath	Linkville.

County.	*County Seat.*
Lake	Lakeview.
Lane	Eugene City.
Linn	Albany.
Marion	Salem.
Multnomah	Portland.
Polk	Dallas.
Tillamook	Tillamook.
Umatilla	Pendleton.
Union	Union.
Wasco	The Dalles.
Washington	Hillsborough.
Yam Hill	LaFayette.

PENNSYLVANIA.

Adams	Gettysburgh.
Alleghany	Pittsburgh.
Armstrong	Kittanning.
Beaver	Beaver.
Bedford	Bedford.
Berks	Reading.
Blair	Hollidaysburgh.
Bradford	Towanda.
Bulks	Doylestown.
Butler	Butler.
Cambria	Ebensburgh.
Cameron	Emporium.
Carbon	Mauch Chunk.
Centre	Bellefonte.
Chester	West Chester.
Clarion	Clarion.
Clearfield	Clearfield.
Clinton	Loch Haven.
Columbia	Bloomsburgh.
Crawford	Meadville.
Cumberland	Carlisle.
Dauphin	Harrisburgh.
Delaware	Media.
Elk	Ridgway.
Erie	Erie.
Fayette	Uniontown.
Forest	Tionesta.
Franklin	Chambersburgh.
Fulton	McConnellsburgh.
Greene	Waynesburgh.
Huntingdon	Huntingdon.
Indiana	Indiana.
Jefferson	Brookville.
Juniata	Mifflintown.
Lackawanna	Scranton.
Lancaster	Lancaster.
Lawrence	Newcastle.
Lebanon	Lebanon.
Lehigh	Allentown.
Luzerne	Wilkesbarre.
Lycoming	Williamsport.
McKean	Smithport.
Mercer	Mercer.
Mifflin	Lewistown.
Monroe	Stroudsburgh.
Montgomery	Norristown.
Montour	Danville.
Northampton	Easton
Northumberland	Sunbury.
Perry	New Bloomfield.
Philadelphia	Philadelphia.

County.	*County Seat.*
Pike	Milford.
Potter	Condersport.
Schuylkill	Pottsville.
Snyder	Middleburgh.
Somerset	Somerset.
Sullivan	LaPorte.
Susquehanna	Montrose.
Tioga	Wellsborough.
Union	Lewisburgh.
Venango	Franklin.
Warren	Warren.
Washington	Washington.
Wayne	Honesdale.
Westmoreland	Greensburgh.
Wyoming	Tunkhannock.
York	York.

RHODE ISLAND.

Bristol	Bristol.
Kent	East Greenwich.
Newport	Newport.
Providence	Providence.
Washington	Kingston.

SOUTH CAROLINA.

Abbeville	Abbeville.
Aiken	Aiken.
Anderson	Anderson.
Barnwell	Barnwell.
Beaufort	Beaufort.
Berkeley	Bonneau.
Charleston	Charleston.
Chester	Chester.
Chesterfield	Chesterfield.
Clarendon	Manning.
Colleton	Walterboro'.
Darlington	Darlington.
Edgefield	Edgefield.
Fairfield	Winnsborough
Georgetown	Georgetown.
Greenville	Greenville.
Hampton	Hampton.
Horry	Conway.
Kershaw	Camden.
Lancaster	Lancaster.
Laurens	Laurens.
Lexington	Lexington.
Marion	Marion.
Marlborough	Bennettsville.
Newberry	Newberry.
Oconee	Walhalla.
Orangeburgh	Orangeburgh
Pickens	Pickens.
Richland	Columbia.
Spartanburgh	Spartanburgh.
Sumter	Sumter.
Union	Union.
Williamsburgh	Kingstree.
York	Yorkville.

TENNESSEE.

Anderson	Clinton.
Bedford	Shelbyville.

County.	*County Seat.*
Benton	Camden.
Bledsoe	Pikeville.
Blount	Maryville.
Bradley	Cleveland.
Campbell	Jacksborough.
Cannon	Woodbury.
Carroll	Huntingdon
Carter	Elizabethton.
Cheatham	Ashland City.
Chester	Henderson.
Claiborne	Tazewell.
Clay	Celina.
Cocke	Newport.
Coffee	Manchester.
Crockett	Alamo.
Cumberland	Crossville.
Davidson	Nashville.
Decatur	Decaturville.
DeKalb	Smithville.
Dickson	Charlotte.
Dyer	Dyersburgh.
Fayette	Somerville.
Fentress	Jamestown.
Franklin	Winchester.
Gibson	Trenton.
Giles	Pulaski.
Grainger	Rutledge.
Greene	Greeneville.
Grundy	Altamont.
Hamblen	Morristown.
Hamilton	Chattanooga.
Hancock	Sneedville.
Hardeman	Bolivar.
Hardin	Savannah.
Hawkins	Rogersville.
Haywood	Brownsville.
Henderson	Lexington.
Henry	Paris.
Hickman	Centerville.
Houston	Erin.
Humphreys	Waverly.
Jackson	Gainesburg.
James	Ooltewah
Jefferson	Dandridge.
Johnson	Taylorsville
Knox	Knoxville.
Lake	Tiptonville.
Lauderdale	Ripley.
Lawrence	Lawrenceburgh.
Lewis	Newburgh.
Lincoln	Fayetteville.
Loudon	Loudon.
McMinn	Athens.
McNairy	Purdy.
Macon	Lafayette.
Madison	Jackson.
Marion	Jasper.
Marshall	Lewisburg.
Maury	Columbia.
Meigs	Decatur.
Monroe	Madisonville.
Montgomery	Clarksville.
Moore	Lynchburgh.
Morgan	Wartburgh.
Obion	Troy.
Overton	Livingston.
Perry	Linden.
Pickett	Byrdstown.
Polk	Benton.
Putnam	Cookville.
Rhea	Washington.
Roane	Kingston.
Robertson	Springfield.
Rutherford	Murfreesburgh.
Scott	Huntsville.
Sequatchie	Dunlap.
Sevier	Sevierville.
Shelby	Memphis.
Smith	Carthage.
Stewart	Dover.
Sullivan	Blountville.
Sumner	Gallatin.
Tipton	Covington.
Trousdale	Hartsville.
Unicoi	Erwin.
Union	Maynardville.
Van Buren	Spencer.
Warren	McMinnville.
Washington	Jonesburgh.
Wayne	Waynesborough.
Weakley	Dresden.
White	Sparta.
Williamson	Franklin.
Wilson	Lebanon.

TEXAS.

Anderson	Palestine.
Angelina	Homer.
Andrews	Unorganized.
Aransas	Rockport.
Archer	Archer.
Armstrong	Unorganized.
Atascosa	Pleasanton.
Austin	Belleville.
Bailey	Unorganized.
Bandera	Bandera.
Bastrop	Bastrop.
Baylor	Seymour.
Bee	Beeville.
Bell	Bellton.
Bexar	San Antonio.
Blanco	Blanco.
Borden	Unorganized.
Bosque	Meridian.
Bowie	Boston.
Brazoria	Brazoria.
Brazos	Bryan.
Briscoe	Unorganized.
Brown	Brownwood.
Burleson	Caldwell.
Burnet	Burnet.
Caldwell	Lockhart.
Calhoun	Indianola.
Callahan	Belle Plaine.
Cameron	Brownsville.
Camp	Pittsburgh.
Carson	Unorganized.
Cass	Linden.
Castro	Unorganized.
Chambers	Wallisville.
Cherokee	Rusk.

County.	County Seat.
Childress	Unorganized.
Clay	Henrietta.
Cochran	Unorganized.
Coleman	Coleman.
Collin	McKinney.
Collingsworth	Unorganized.
Colorado	Columbus.
Comal	New Braunfels.
Comanche	Comanche.
Concho	Paint Rock.
Cooke	Gainesville.
Coryell	Gatesville.
Cottle	Unorganized.
Crockett	Fort Terrell.
Crosby	Unorganized.
Dallam	Unorganized.
Dallas	Dallas.
Dawson	Unorganized.
Deaf Smith	Unorganized.
Delta	Cooper.
Denton	Denton.
DeWitt	Clinton.
Dickens	Unorganized.
Dimmit	Carrizo Springs.
Donley	Unorganized.
Duval	San Diego.
Eastland	Eastland.
Edwards	Unorganized.
Ellis	Waxahatchie.
El Paso	Ysleta.
Encinal	Unorganized.
Erath	Stephenville.
Falls	Marlin.
Fannin	Bonham.
Fayette	La Grange.
Fisher	Unorganized.
Floyd	Unorganized.
Fort Bend	Richmond.
Franklin	Mt. Vernon.
Freestone	Fairfield.
Frio	Frio Town.
Gaines	Unorganized.
Galveston	Galveston.
Garza	Unorganized.
Gillespie	Fredericksburgh.
Goliad	Goliad.
Gonzales	Gonzales.
Gray	Unorganized.
Grayson	Sherman.
Greer	Unorganized.
Gregg	Long View.
Grimes	Anderson.
Guadalupe	Seguin.
Hale	Unorganized.
Hall	Unorganized.
Hamilton	Hamilton.
Hansford	Unorganized.
Hardman	Unorganized.
Hardin	Hardin.
Harris	Houston.
Harrison	Marshall.
Hartley	Unorganized.
Haskel	Unorganized.
Hays	San Marcos.
Hemphill	Unorganized.
Henderson	Athens.
Hidalgo	Hidalgo.
Hill	Hillsborough.
Hockley	Unorganized.
Hood	Granbury.
Hopkins	Sulphur Springs.
Houston	Crockett.
Howard	Unorganized.
Hunt	Greenville.
Hutchinson	Unorganized.
Jack	Jacksonborough.
Jackson	Texana.
Jasper	Jasper.
Jefferson	Beaumont.
Johnson	Cleburne.
Jones	Phantom Hill.
Karnes	Helena.
Kaufman	Kaufman.
Kendall	Boerne.
Kent	Unorganized.
Kerr	Kerrville.
Kimble	Junction City.
King	Unorganized.
Kinney	Brackettville.
Knox	Unorganized.
Lamar	Paris.
Lamb	Unorganized.
Lampasas	Lampasas.
La Salle	Cotulla.
Lavaca	Hallettsville.
Lee	Giddings.
Leon	Centreville.
Liberty	Liberty.
Limestone	Groesbeck.
Lipscomb	Unorganized.
Live Oak	Oakville.
Llano	Llano.
Lubbock	Unorganized.
Lynn	Unorganized.
McCulloch	Brady.
McLennan	Waco.
McMullen	Tilden.
Madison	Madisonville.
Marion	Jefferson.
Martin	Unorganized.
Mason	Mason.
Matagorda	Matagorda.
Maverick	Eagle Pass.
Medina	Castroville.
Menard	Menardville.
Milam	Cameron.
Mitchell	Unorganized.
Montague	Montague.
Montgomery	Montgomery.
Moore	Unorganized.
Morris	Daingerfield.
Motley	Unorganized.
Nacagdoches	Nacagdoches.
Navarro	Corsicana.
Newton	Newton.
Nolan	Unorganized.
Nueces	Corpus Christi
Ochiltree	Unorganized.
Oldham	Tascosa.
Orange	Orange.
Palo Pinto	Palo Pinto.
Panola	Carthage.

County.	*County Seat.*
Parker	Weatherford.
Parmer	Unorganized.
Pecos	Fort Stockton.
Polk	Livingston.
Potter	Unorganized.
Presidio	Fort Davis.
Rains	Emory.
Randall	Unorganized.
Red River	Clarksville.
Refugio	Refugio.
Roberts	Unorganized.
Robertson	Calvert.
Rockwall	Rockwall.
Runnels	Runnels.
Rusk	Henderson.
Sabine	Hemphill.
San Augustine	San Augustine.
San Jacinto	Cold Spring.
San Patricio	San Patricio.
San Saba	San Saba.
Scurry	Unorganized.
Shackelford	Albany.
Shelby	Centre.
Sherman	Unorganized.
Smith	Tyler.
Somervell	Glen Ros
Starr	RioGrande C'y
Stephens	Breckenridge.
Stonewall	Unorganized.
Swisher	Unorganized.
Tarrant	Fort Worth.
Taylor	Buffalo Gap.
Terry	Unorganized.
Throckmorton	Throckmorton.
Titus	Mt. Pleasant.
Tom Green	Ben Ficklin.
Travis	Austin.
Trinity	Pennington.
Tyler	Woodville.
Upshur	Gilmer.
Uvalde	Uvalde.
Van Zandt	Canton.
Victoria	Victoria.
Walker	Huntsville.
Waller	Hempstead.
Washington	Brenham.
Webb	Laredo.
Wharton	Wharton.
Wheeler	Mobeetie.
Wichita	Unorganized.
Wilbarger	Unorganized.
Williamson	Georgetown.
Wilson	Floresville.
Wise	Decatur.
Wood	Quitman.
Yoakum	Unorganized.
Young	Graham.
Zapata	Carrizo.
Zavalla	Unorganized.

UTAH.

Beaver	Beaver.
Box Elder	Box Elder.
Cache	Logan.
Davis	Farmington.
Emery	Castle Dale.
Garfield	Panguitch.
Iron	Parowan.
Juab	Nephi.
Kane	Kanab.
Millard	Fillmore City.
Morgan	Morgan.
Pi Ute	Junction.
Rich	Randolph.
Salt Lake	Salt Lake City.
San Juan	Bluff.
San Pete	Manti.
Sevier	Richfield.
Summit	Coalville.
Tooele	Tooele.
Uintah	Ashley.
Utah	Provo City.
Wasatch	Heber.
Washington	St. George.
Weber	Ogden City.

VERMONT.

Addison	Middlebury.
Bennington	Bennington.
Caledonia	St. Johnsbury.
Chittendon	Burlington.
Essex	Guildhall.
Franklin	St. Albans.
Grand Isle	N. Hero.
Lamoille	Hyde Park.
Orange	Chelsea.
Orleans	Irasburgh.
Rutland	Rutland.
Washington	Montpelier.
Windham	Newfane.
Windsor	Woodstock.

VIRGINIA.

Accomack	Accomack.
Albemarle	Charlottesville.
Alexandria	Alexandria.
Alleghany	Covington.
Amelia	Amelia.
Amherst	Amherst.
Appomattox	Appomattox.
Augusta	Staunton.
Bath	Warm Springs
Bedford	Liberty.
Bland	Bland.
Botetourt	Fincastle.
Brunswick	Lawrenceville.
Buchanan	Grundy.
Buckingham	Buckingham C.H.
Campbell	Rustburgh.
Caroline	Bowling Green.
Carroll	Hillsville.
Charles City	Charles City C.H.
Charlotte	Smithville.
Chesterfield	Chesterfield.
Clarke	Berryville.
Craig	New Castle.
Culpeper	Culpeper.
Cumberland	Cumberland.
Dickenson	Ervinton.

County.	*County Seat.*
Dinwiddie	Dinwiddie.
Elizabeth City	Hampton.
Essex	Tappahannock.
Fairfax	Fairfax.
Fauquier	Warrenton.
Floyd	Floyd.
Fluvanna	Palmyra.
Franklin	Rocky Mount.
Frederick	Winchester.
Giles	Pearisburgh.
Gloucester	Gloucester.
Goochland	Goochland.
Grayson	Independence.
Green	Stanardsville.
Greenville	Hicksford.
Halifax	Halifax.
Hanover	Hanover.
Henrico	Richmond.
Henry	Martinsville.
Highland	Monterey.
Isle of Wight	Isle of Wight.
James City	Williamsburgh.
King and Queen	King and Q.
King George	King George.
King William	King William.
Lancaster	Lancaster.
Lee	Jonesville.
Loudoun	Leesburgh.
Louisa	Louisa.
Lunenburgh	Lunenburgh.
Madison	Madison.
Matthews	Matthews.
Mecklenburgh	Boydton.
Middlesex	Saluda.
Montgomery	Christsburgh.
Nansemond	Suffolk.
Nelson	Lovingston.
New Kent	New Kent.
Norfolk	Norfolk.
Northampton	Eastville.
Northumberland	Heathsville.
Nottoway	Nottoway.
Orange	Orange.
Page	Luray.
Patrick	Patrick.
Pittsylvania	Chatham.
Powhatan	Powhatan.
Prince Edward	Farmville.
Prince George	Prince George
Princess Anne	Prs. Anne.
Prince William	Brentsville.
Pulaski	Newbern.
Rappahannock	Washington.
Richmond	Warsaw.
Roanoke	Salem.
Rockbridge	Lexington.
Rockingham	Harrisonburgh.
Russell	Lebanon.
Scott	Estillville.
Shenandoah	Woodstock.
Smyth	Marion.
Southampton	Jerusalem.
Spottsylvania	Spottsylvania.
Stafford	Stafford.
Surrey	Surrey.
Sussex	Sussex.

County.	*County Seat.*
Tazewell	Tazewell.
Warren	Front Royal.
Warwick	Warwick.
Washington	Abingdon.
Westmoreland	Montrose.
Wise	Wise.
Wythe	Wytheville.
York	Yorktown.

WASHINGTON.

Chehalis	Montesano.
Clallam	New Dungeness.
Clarke	Vancouver.
Columbia	Dayton.
Cowlitz	Kalama.
Garfield	Pomeroy.
Island	Coupeville.
Jefferson	Port Townsend.
King	Seattle.
Kitsap	Port Madison.
Klikitat	Goldendale.
Lewis	Claquato.
Mason	Oakland.
Pacific	Oysterville.
Pierce	New Tacoma.
San Juan	Friday Harbor.
Skamania	Cascades.
Snohomish	Snohomish.
Spokan	Cheney.
Stevens	Fort Colville.
Thurston	Olympia.
Wahkiakum	Cathlamet.
Walla Walla	Walla Walla.
Whatcom	Whatcom.
Whitman	Colfax.
Yakima	Yakima.

WEST VIRGINIA.

Barbour	Philippi.
Berkeley	Martinsburgh.
Boone	Madison.
Braxton	Braxton C. H.
Brooke	Wellsburgh.
Cabell	Barboursville.
Calhoun	Grantsville.
Clay	Clay C.H.
Doddridge	West Union.
Fayette	Fayetteville.
Gilmer	Glenville.
Grant	Petersburgh.
Greenbrier	Lewisburgh.
Hampshire	Romney.
Hancock	Fairview.
Hardy	Moorefield.
Harrison	Clarksburgh.
Jackson	Jackson C.H.
Jefferson	Charlestown.
Kanawha	Charleston.
Lewis	Weston.
Lincoln	Hamlin.
Logan	Logan C. H.
McDowell	Perryville.
Marion	Fairmount.
Marshall	Moundsville.

County.	*County Seat.*
Mason	Point Pleasant.
Mercer	Princeton.
Mineral	Keyser.
Monongalia	Morgantown.
Monroe	Union.
Morgan	Berkeley Springs.
Nicholas	Nicholas C. H.
Ohio	Wheeling.
Pendleton	Franklin.
Pleasants	St. Mary.
Pocahontas	Huntersville.
Preston	Kingwood.
Putnam	Winfield.
Raleigh	Raleigh C. H.
Randolph	Beverly.
Ritchie	Ritchie C. H.
Roane	Spencer.
Summers	Hinton.
Taylor	Grafton.
Tucker	St. George.
Tyler	Middlebourne.
Upshur	Buckhannon.
Wayne	Wayne C. H.
Webster	Webster C. H.
Wetzel	New Martinsville.
Wirt	Wirt C. H.
Wood	Parkersburg.
Wyoming	Oceana.

WISCONSIN.

Adams	Friendship.
Ashland	Ashland.
Barron	Barron.
Bayfield	Bayfield.
Brown	Green Bay.
Buffalo	Alma.
Burnett	Grantsburgh.
Calumet	Chilton.
Chippewa	Chippewa Falls.
Clark	Neillsville.
Columbia	Portage.
Crawford	Prairie du Chien.
Dane	Madison.
Dodge	Juman.
Door	Sturgeon Bay.
Douglas	Superior.
Dunn	Menomonee.
Eau Claire	Eau Claire.
Florence	Florence.
Fond du Lac	Fond du Lac.
Grant	Lancaster.
Green	Monroe.
Green Lake	Dartford.
Iowa	Dodgeville.
Jackson	Black River Falls.
Jefferson	Jefferson.
Juneau	Manston.
Kenosha	Kenosha.
Kewaunee	Kewaunee.
LaCrosse	LaCrosse.
LaFayette	Darlington.
Langlade	Antigo.
Lincoln	Merrill.
Manitowoc	Manitowoc.
Marathon	Wausau.
Marinette	Marinette.
Marquette	Montello.
Milwaukee	Milwaukee.
Monroe	Sparta.
Oconto	Oconto.
Outagamie	Appleton.
Ozaukee	Port Washington.
Pepin	Arkansaw.
Pierce	Ellsworth.
Polk	Osceola Mills.
Portage	Stevens Point.
Price	Phillips.
Racine	Racine.
Richland	Richland Centre.
Rock	Janesville.
St. Croix	Hudson.
Sauk	Baraboo.
Sawyer	Hayward.
Shawano	Shawano.
Sheboygan	Sheboygan.
Taylor	Medford.
Trempealeau	Whitehall.
Vernon	Viroqua.
Walworth	Elkhorn.
Washburn	Shell Lake.
Washington	West Bend.
Waukesha	Waukesha.
Waupaca	Waupaca.
Waushara	Wautoma.
Winnebago	Oshkosh.
Wood	Grand Rapids.

WYOMING.

Albany	Laramie City.
Carbon	Rawlins.
Crook	Unorganized.
Johnson	Buffalo.
Laramie	Cheyenne City.
Sweetwater	Green River City.
Uintah	Evanston.
Yellowstone National Park.	

MAINE.

Named for district in France. Called the "Pine Tree State," or "Lumber State"; originally included New Hampshire; settled by English 1607, by French in 1613. The latter were partially driven out, but retained control between the St. Croix and Penobscot rivers. King James I. granted to the Plymouth Company, 1620, all land between 40 deg. and 48 deg. latitude. The company granted New Hampshire to John Mason 1629, and six years later divided the territory among its members. To Ferdinando Gorges fell the entire region from the Kennebec to the Piscataqua, with hereditary power from Charles I. as governor. The remainder was parceled out. Massachusetts claimed the whole region 1651, and got it under favor of the Puritans then in power. When Charles II. was crowned the heirs of Gorges claimed it, but were bought off for $6,250. Settlers suffered severely from Indian wars 1670 to 1680. The territory was held by the British in the war of 1812; separated from Massachusetts in 1820, and admitted as a state March 3, 1820. Boundary settled with England 1842, and the free navigation of the St. John acquired; number counties, 16; Union soldiers, 70,107; miles of railroad, 1,142. State elections, second Monday in Sept.: number senators, 31; representatives, 151; sessions biennial, in odd-numbered years, meeting first Wednesday in Jan.; terms of senators and representatives, two years each. Number electoral votes, 6; congressmen, 4; number voters, 187,323; paupers and Indians not taxed excluded from voting. Number colleges, 3; system of common, high and normal schools excellent; school age, 4–21 years. Legal rate, interest 6; by contract, any rate.

POPULATION, 1880, 648,936; male, 324,058; female. 324,878; native, 590,053; foreign, 58,883; white, 646,852; colored, 1,451; Chinese, 8; Indians, Penobscots, 625; Passamaquoddies, 502.

TOPOGRAPHY, AREA, SOIL PRODUCTS, ETC.—Extreme length north and south, 298 miles; width 210 miles; shore line, about 2,480 miles; area, 33,056 sq. miles; land 29,885 sq. miles; 21,155,840 acres; 37th of states and territories in size. Surface hilly; becomes mountainous toward center. To the north it is less broken, and merges into the St. John valley. Scenery always fine; sometimes grand. Highest point, Katahdin, 5,400 feet; largest island, Mount Desert, 92 square miles. Watered by the Penobscot, Androscoggin, Saco, St. Croix, Aroostook, St. John and a multitude of smaller streams, and by Moosehead (7x36 miles in area), Umbagog, Eagle, Portage, Millinoket, Sebec, Shoodic, Long, Madawaska, and smaller lakes. Area of lakes and streams, one-thirteenth entire state. The soil is medium only, except on some of the streams, where it is rich. Hay is the best crop. Wheat, oats, corn, hops, potatoes, buckwheat and the ordinary vegetables grow. Cattle do fairly; dairying pays. Half the state is forest of excellent timber. Cleared land averages $15 and forest land $14 per acre. Slate, copper, granite, are found in large quantities.

CLIMATE.—Winter average, 29 deg.; summer, 67 deg.; rainfall, 45 inches; snow lies 80 to 130 days; frost comes about middle of September, and as late as June. Health excellent, except for pulmonary troubles; death rate low.

CHIEF INDUSTRIES.—Agriculture and kindred pursuits, lumbering, fisheries (yield, $3,620,000 yearly), quarrying, ship building (380 establishments).

PRINCIPAL CITIES.- Portland (seaport), population 31,413; Lewiston, 19,083; Bangor (port of entry), 16,856; Biddeford, 12,651; and Augusta, the capital, 8,665.

PROPERTY EXEMPT from execution: Wearing apparel, one bed and bedding for every two persons in family, other furniture to value of $50, tools of trade, bibles and school books in use, 1

copy state statutes, family stoves, 1 cow, 1 heifer, 2 swine, 10 sheep, 9,000 lbs. hay, all growing produce, 30 bushels grain, all potatoes needed for sustenance of family, 12 cords firewood, 1 boat of two tons burden, cart worth $25, harrow $5, plow $10, 5 tons anthracite and 50 bushels bituminous coal, yoke oxen, pair horses, with yokes and harness, 1 sewing machine used by family, all flax

raised on half acre, and articles made therefrom. *The homestead*, to the value of $500, may be exempted by recorded deed from all debts incurred after filing such deed. No arrest for debt unless in case of fraud or intended removal from state. Declaration of insolvency stops suits. All accounts barred in 6, notes in 20, real estate claims in 40 years, and actions for personal damage in 2 years. Women may sue and be sued; her estate is not liable for the husband's debts.

LICENSE CHARGES to resident peddlers, retail, $10; wholesale, $25. Non-resident, retail, $25; wholesale, $50.

LIENS are held for labor or materials by filing statement with town clerk in 90 days when there is contract; in 30 days when there is no contract.

NEW HAMPSHIRE.

One of the thirteen original states. Named for Hampshire county, England. called the "Granite State." Originally part of Maine, and included in grant, James 1st, to Plymouth Company, 1620. Settled by English 1623. Granted to John Mason and others, 1629. United with Massachusetts, 1641. Separated from latter, 1741. It included the greater part of Vermont, but the claim to same was disputed by New York. In 1771 Vermont separated. State Constitution adopted 1784, revised 1792, amended 1851 and revised 1877. Ratified United States Constitution June 21, 1788. Union soldiers in field, 33,937. Number counties, 10; miles railroad, 660. All elections, Tuesday after first Monday in Nov.; number Senators, 24; Representatives, 321; sessions of legislature biennial, in odd-numbered years, meeting first Wednesday in June; terms of Senators and representatives, 2 years each. Number electoral votes, 4; Congressmen, 2; number voters, 105,138. Paupers excluded from voting. Dartmouth College, at Hanover, founded, 1769; compulsory education law; common schools excellent; school age, 5-15. Legal interest 6%; usury forfeits 3 times the excess.

POPULATION, 1880, 346,991; male, 178,526; female, 176,465; native, 300,697; white, 346,229; colored, 685; Indians, 63.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length N. and S. 181 miles; extreme width, 92 miles; area, 9,005 square miles—5,763,200 acres. Coast line, 18 miles. Highest peak, Mt. Washington. Largest lake, Winnipiseogee, 74 square miles. General elevation, 1,200 feet. Isles of Shoals form part of the state. The White Mountains occupy the northern portion of the state with unsurpassed scenery. The surface slopes southward and becomes less mountainous. Principal rivers, Connecticut, Merrimac, Androscoggin, Piscataqua and tributaries. Principal lakes, Winnipiseogee, Umbagog and 4 Connecticut lakes, the source of the river of that name. Soil rocky, with small fertile districts. Hay best crop; corn, wheat, oats and ordinary vegetables do fairly with close cultivation. Forests largely exhausted except at the north. Cleared lands average $16⅔ and woodland $25 per acre. Mica is quarried at Grafton, soapstone at Haverhill, Keene and Francestown; granite, at Plymouth, Troy, Roxbury, Concord and elsewhere. State ranks high in cotton manufacturing.

CLIMATE.—Winter average 24, summer 69 deg. Extremes great in White Mountains. Summer short and hot, with violent storms. Rainfall 41 inches. Frost late in spring and early in fall. Winter begins in Nov., and it is cold till May. Snow lies two-thirds of the year in mountains, elsewhere 70 to 130 days. Health good.

PRINCIPAL INDUSTRIES.—Agriculture, manufacture of cotton, woolens, lumber, leather, boots and shoes, etc. Quarrying mica, granite and soapstone.

PRINCIPAL CITIES.—Manchester, pop., 32,630; Nashua, 13,397; Concord (the capital), 13,843;, Dover, 11,687; Portsmouth (chief harbor), 959. The harbor of the latter place, Great Bay, never freezes over.

PROPERTY EXEMPT from execution: Wearing apparel, bedsteads and bedding for debtor and family; household furniture to the value of $100; cooking-stove and furniture for same; sewing-machine; provisions and fuel to the value of $50; uniform, arms and equipment of militia; Bibles, school-books and library to the value of $200; tools of debtor's occupation to the value of $100; 1 hog and 1 pig and the pork of same when slaughtered; 6 sheep and the fleeces of same; 1 cow; a yoke of oxen or a horse, when required for farming or teaming purposes or other actual uses; hay not exceeding 4 tons; *homestead* to the value of $500, or that interest in buildings occupied by debtor. Assignments do not release debtor nor can preference be made. Suits to recover land on mortgage judgment and bonds are barred after 20 years, for personal damage or slander after 2 years, for all other actions in 6 years. Wife's property and earnings exempt from husband's debts. Arrest for debts above $13.33 may be made on affidavit of concealment of property or contemplated departure from the state. Money owed upon which interest is paid may be deducted from money in hand or loaned in returning property for taxes.

LICENSE CHARGES.—Peddlers, $10 per year.

LIENS on buildings are given for labor and for materials to amount of $1,500 for 90 days; laborers on wood have similar lien. Boarding-house keepers hold baggage of boarders. Pasturers have lien on stock pastured.

VERMONT.

First state to join original 13. Name, of French origin, signifies "green mountain." Called the "Green Mountain State." Originally disputed territory between New York and New Hampshire, ruled chiefly by latter. Settled by emigrants from Massachusetts, 1624; by French, 1731. The latter soon abandoned it. Declared independent of both New York and New Hampshire, 1771, at Westminster. Took name of "New Connecticut" or Vermont. Took part in Revolution. Sought admission to Confederation, 1776, but refused through oppposition of New York. Applied again, 1777, and admitted 1791. Constitution adopted, 1777; amended, 1786; again in 1793, and revised, 1870. Active in war of 1812. Union soldiers furnished, 33,288. Number counties, 14. Miles railroad, 944. First railroad built from Bellows Falls to Burlington, 1849. State elections biennial, first Tuesday in Sept.; number Senators, 30; Representatives, 240; sessions of legislature biennial, in even-numbered years, meeting first Wednesday in Oct.; terms of Senators and Representatives, 2 years each. Number electoral votes, 4; Congressmen, 2; number voters, 95,621. Bribers excluded from voting. Colleges, 2; school age, 5–20. Legal interest rate, 6%; usury forfeits excess of interest.

POPULATION, 1880, 332,286; male, 166,887; female, 165,399. native, 291,327; foreign, 40,959; white, 331,218; colored, 1,057;

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 149 miles; width, 34 to 52 miles; area, 9,136 sq. miles, 5,847,040 acres. Highest point (Green Mountains), about 4,600 feet. Largest lake, Champlain, 126 miles long and in places 15 miles wide; navigable throughout. Isles in lake form Grand

Isle county. Green Mountains run N. and S. through the state, and are 3,000 to 4,600 feet high. Besides which many spurs and detached peaks break the surface, which is generally hilly. All east of mountains drained by the Connecticut, the only navigable river. The Sorel river, the outlet of Lake Champlain, is the other chief stream, and empties into St. Lawrence. Small streams abundant. Soil rocky but good in narrow strips on streams. Potatoes best crop. Corn, wheat, oats, hay, hops and buckwheat yield moderately if well attended. Forests remain to considerable extent but are cut over or culled. Cleared land averages $17.50 and forest land $18 per acre. Dairying profitable. Manganese, copper, iron, gold, black, white, red and variegated marble and slate are found, the marbles in great abundance. State ranks 1st in quarries, 4th in copper.

CLIMATE.—Ranges of temperature, 15 deg. below to 95 deg. above, but changes not sudden; winter averages 18 deg. to 33 deg. Summer averages 66 deg. to 75 deg. Summers short. Rainfall greatest at south and east, where it averages 43 inches; in other sections the average is 35 inches. Snows heavy. Frosts early in fall and late in spring. Snow lies 80 to 140 days. Health excellent, miasma unknown. Pulmonary diseases less common than on coast. Death rate very low, less than 1¾ in the 100.

INDUSTRIES very varied, numbering 2,900; principal ones, agriculture, dairying, manufacture of flour, furniture, leather, tin, iron and copper ware, and lumber, mining, quarrying and finishing marbles and stones, and maple sugar making.

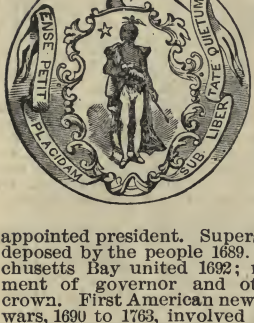
PRINCIPAL CITIES.—Burlington, pop., 1880, 11,365; Montpelier (capital), pop., 1880, 4,000; Rutland, pop., 1880, 12,149. Brattleboro and Bellows Falls are important and thriving towns and seats of large industries.

PROPERTY EXEMPT from execution: Apparel, bedding, tools, arms, necessary household furniture, 1 sewing-machine for use, 1 cow, 1 swine or the meat thereof, 10 sheep, and 1 year's wool or the manufacture thereof, forage for the stock named, 10 cords firewood, 20 bu. potatoes, 10 bu. grain, 1 bbl. flour, all growing crops, 3 swarms bees and hives, and product of the bees, 200 lbs. sugar, Bibles and books used in family, $10 worth poultry, professional book to value of $200, 1 yoke oxen or two horses kept in use not worth over $200, forage for same, wagon or cart and sled, with harness and furnishings, not to exceed in value $250. Exemptions do not affect attachments prior to Dec. 1st, 1878. The homestead of every housekeeper is also exempt to value of $500, with yearly product thereof, except the cause of action accrue before acquisition of homestead and against taxes. Homestead passes direct to heirs at death free of debts. Assignments without preference may be made, but creditor is not discharged. Bankrupt law in force discharges debts if 30% be paid. Under it taxes, United States, state, wages to $50, are preferred. Suits to recover land barred in 15 years; on contract, injury or account in 6; on bond or judgment in 8; on assault or imprisonment in 3; for libel or slander in 24, and on note in 14 years. Wife's property exempt except income for debts for necessities or labor or improvements on the property. Her earnings exempt. She may do business in her own name and is then liable. Women cannot be arrested in action for debt. Men arrested only on affidavit of removal or concealment of property, or in cases where fraud is alleged. The power of arrest is largely discretionary with the judge and is very sparingly used, liberality being the rule to debtors.

LICENSE CHARGES.—per year. Peddlers on foot, $15; with team, $30; if watches, clocks, jewelry or patent medicines are sold, $60. License issued by county clerk.

LIENS for work or materials for buildings hold, but must be filed in town clerk's office and action on same begun inside of 3 months after filing.

MASSACHUSETTS.

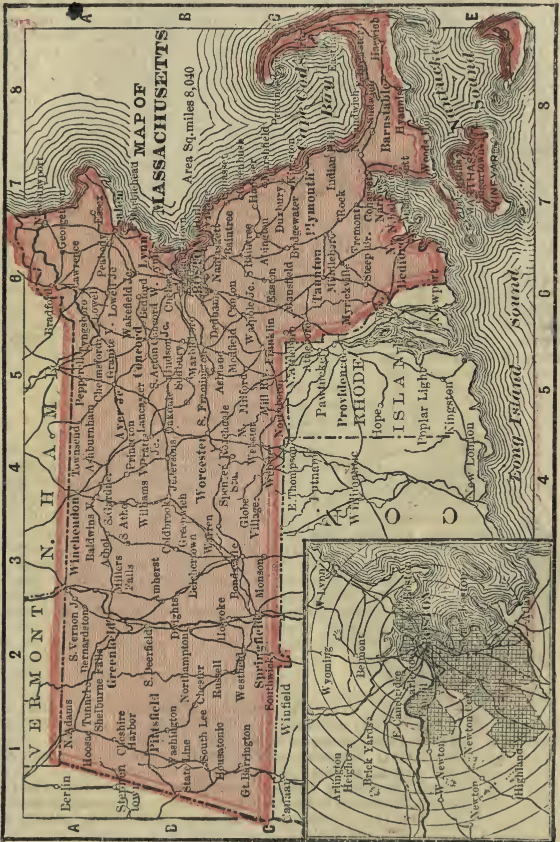


Indian name. Called "Old Bay State." One of the 13 original states. First settlement 1602, abandoned the same year. Explored 1614 by Captain John Smith. First permanent settlement 1620. Pilgrims landed on Plymouth Rock Dec. 22. Massachusetts Bay colony founded 1628. Boston settled 1630. Massachusetts Bay Company chartered under Charles I. Annulment of charter attempted. Colonists refused to surrender and fortified Boston harbor. Pequot war, 1637. King Philip war, 1675–6. Charter forfeited 1684. General court dissolved and Joseph Dudley appointed president. Superseded 1686 by Sir E. Andros, who was deposed by the people 1689. Colonies of Plymouth and Massachusetts Bay united 1692; received new charter; the appointment of governor and other officers being vested in the crown. First American newspaper, Boston, 1690. Anglo-French wars, 1690 to 1763, involved Massachusetts. Renewed hostilities with French and Indians, 1703–4, and the last general war with latter occurred 1722–5. Massachusetts was active in bringing on Revolution. Boston massacre March 5, 1770. Destruction of tea Dec. 16, 1773. Boston port bill passed March, 1774. Battle of Lexingtou first blood of Revolution. State constitution adopted 1780; amended 1820 and 1857. Ratified U. S. constitution Feb. 6, 1788. Shay's rebellion, induced by heavy taxation caused by the revolutionary war, 1786–7. Maine separated from Massachusetts, 1820. Village of Fall river acquired from Rhode Island in exchange for town of Pawtucket and other territory, 1861. Union soldiers, 146,730, besides sailors. Number counties, 14. Miles railroad, 2,998. All elections Tuesday after first Monday in Nov. Number senators, 40; representatives, 240; meeting first Wednesday in Jan.; yearly terms of senators and representatives, 1 year. Number electoral votes, 14; congressmen, 12. Number voters, 502,648. Paupers, persons under guardians, non-taxpayers, and men unable to read and write, excluded from voting. School system excellent; attendance compulsory; age, 5–15 years; 7 colleges, including Harvard. Legal interest, 6 %; by contract, any rate.

POPULATION, 1885, 1,941,465; three-fourths native; females outnumber males. Indians, 369.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length, N. E. to S. W., 162 miles; breadth, 47 miles in western and 100 in eastern part; area of 8,040 square miles, 5,145,600 acres. Coast extensive and irregular, with numerous good harbors. The Merrimac only large stream entering sea within the state. The Connecticut traverses western part north to south. Housatonic, Blackstone and Taunton rivers flow through Massachusetts, and Charles and Mystic rivers enter Boston Bay. The rivers afford valuable water power, none navigable but Merrimac. The Taconic and Hoosac ridges traverse the state at the west. Saddle mountain, 3,600 feet, the highest peak. The east and northeast divisions are hilly and broken, and the southeast low and sandy. Scenery very beautiful, especially in Berkshire hills; soil generally light; hay best crop; wheat, oats, corn and vegetables grown. Forests practically exhausted. Cleared land averages $80, and woodland $45 per acre. Stone is found. No minerals mined. Elizabeth Islands, Martha's Vineyard, Nantucket and smaller islands to the south belong to the state.

CLIMATE.—Winters severe and protracted; summers short and warm; thermometer ranges from 10 deg. below to 100 deg.; averages summer, 73 deg.; winter, 24 deg.; snow falls Oct. to April; rainfall, including snow, 44 inches; prevailing winds from east; heavy fogs common on coast.



CHIEF INDUSTRIES.—Agriculture and kindred callings. Fishing for cod and mackerel (half the fishing vessels of the Union owned here). Manufacture of cotton, woolen, worsted, silk, iron and steel goods, soap and implements, quarrying.

PRINCIPAL CITIES.—Boston, capital; pop. 390,406; Lowell, pop. 64,051; Lawrence and Fall River, famous for cotton manufactures; pop. 39,151, and 48,961; Worcester, railroad and

manufacturing center, pop. 58,291; Cambridge, seat of Harvard College, pop. 52,669; Lynn, famous for manufacture of boots and shoes, pop. 38,274; New Bedford, greatest whaling port in the world; pop. 26,845; Springfield contains greatest arsenal in the United States, pop. 33,340. Ports of entry, 9.

PROPERTY EXEMPT from execution: apparel, $20 worth of coal, stores, beds and $100 worth furniture, books in use, cow, 6 sheep, 1 hog, 2 tons hay, tools of trade to $100, material of business $100, arms, etc., of militia, $50 worth provisions, homestead to value of $800, declared such in deed of purchase or by recorded declaration. Debts to United States, wages and physicians' bills preferred. Bankrupt law applies to debtors for more than $100. Debts discharged by consent of majority of creditors. Suits for land barred after 20, on contracts not sealed after 6, for wages after 4, on notes and all other actions after 20 years. Wife's property exempt, including ornaments and apparel to value of $2,000. She can sue and be sued, etc., same as if single; her note good, if not joint with husband, but does not bind husband. Women cannot be arrested for debt. Men may be arrested on affidavit of concealment or avoidance where claim exceeds $20.

LICENSE CHARGES.—Peddlers, $50 per year; special county license, $1 to $4. Permissions to obtain town licenses, $3 to $25; all issued by Secretary of State.

LIENS are given on buildings for labor and material. Notice must be given owner, and statement of lien filed in county register's office in 30 days after work is done, and suit brought in 90 days. Vessels are subject to like liens. Boarders' (except sailors') effects subject to lien for board, and cattle for pasturage.

RHODE ISLAND.

One of the 13 original states. Called "Little Rhody." First settled at Providence, 1636, by Roger Williams. Island of Aquidneck (Rhode Island), bought from Indians, 1638, and Newport and Portsmouth founded. Patent obtained, 1643, provided for union of the settlements, which they accepted 1647. Charter of Charles II., 1663, served as organic law of state till 1843, when present constitution was ratified. R. I. suffered terribly during King Philip wars, 1675-76; Providence burnt during same. Colony deprived, 1687, of right of self-government by Sir E. Andros. The fall of the latter on success of the English revolution, 1688, restored liberties, 1689. Lands of Narragansett Indians acquired by purchase, 1709. Pop. 60,000 in 1770. R. I. seamen distinguished themselves in the Anglo-French wars, 1750 to 1763, and in Revolution. First American squadron sailed from Providence under command of Esek Hopkins. Newport occupied by British, 1776, and besieged unsuccessfully by Gen. Sullivan and French fleet under Count d'Estaing, 1778. British forces evacuated 1779. Count de Rochambeau arrived at Newport July 10, 1780, with fleet of transports and 6,000 soldiers. Rhode Island was not represented in the convention, 1787, which framed Constitution of United States, and was the last state to ratify same, 1790. "Dorr rebellion," 1842 caused by insufficiency of the old charter, which still served as the constitution. The Dorr government twice assembled, but was dispersed by state authorities. Disputed boundaries adjusted 1861 by ceding to Massachusetts Fall River in exchange for Paw-

tucket and a part of Seekonk (East Providence). Union soldiers furnished, 23,236. Number counties, 5. Miles railroad, 147. State elections, first Wednesday in April; elects 72 Representatives, 34 Senators, 2 Congressmen and 4 presidential electors. Legislature

meets annually on last Tuesday in May, at Newport, and holds adjourned session annually at Providence; terms of Senators and Representatives, 1 year. Persons without property to the value of $134 excluded from voting. Brown's University at Providence, founded 1764; common school system excellent: school age, 5-15. Legal interest rate, 6%; by contract, any rate.

POPULATION, 1885, 304,284; three-fourths native; females predominate; Indians, 74.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Area, 1,088 sq. miles, or 696,320 acres. Length N. and S. 46 miles;

width, 40 miles. Narragansett Bay divides the state unequally, the western and larger part extending N. from the ocean some 27 miles. The bay is 3 to 12 miles wide and contains several islands, of which Aquidneck, Canonicut and Prudence are largest. Block Island, at the western entrance of the bay, also belongs to this state. Surface of state broken and hilly. Small rivers unfit for navigation are numerous and afford valuable water powers. Chief rivers: Pawtucket and Pawtuxet, entering Narragansett bay; and Pawcatuck, falling into Long Island sound. The state contains numerous small lakes, some of great beauty. Scenery varied and pretty. Soil middling quality. Hay best crop. Potatoes, corn and oats are the next most important products. No forests. Dairying profitable. Land high-priced. No minerals mined.

CLIMATE, owing to nearness to sea, moderate. Average temperature: winter, 24 to 42 deg.; summer, 44 to 74 deg. Rainfall, 43 inches. Snow lies 60 to 100 days. Health good.

CHIEF INDUSTRIES.—Manufacture of fabrics of cotton, flax, linen, wool, boots and shoes, rubber goods, metals, jewelry, etc., agriculture, dairying. Rhode Island, in proportion to size, is the largest manufacturing state in Union.

PRINCIPAL CITIES.—Providence, (capital and seaport), pop., 1885, 118,070. Newport (capital, seaport, finest in world, and great pleasure resort), pop. 15,693. Bristol (seaport). Warren (seaport). Lincoln, pop. 13,765. Pawtucket, pop. 19,030. Woonsocket, pop. 16,050.

PROPERTY EXEMPT from execution: wearing apparel and tools to value of $200; furniture and provisions, $300; books, cow, pig, hog and pork of same, arms, etc., of militia, promissory notes, exchange and $10 wages. Assignments made without preference. Debtor not released. Wages to amount of $100 preferred. Suits to recover land and on foreign judgment barred after 20 years; after 1 year for slander, 4 years for trespass, 6 years on accounts. Arrest for debt only permitted on affidavit of intended removal or secretion of property. Females cannot be arrested for debt. Wife's property exempt. She cannot do business.

LICENSE CHARGES.—Peddlers, $60 to state; $30 to Providence county; $15 to other counties. Peddlers, jewelry, $200 to state, $100 to Providence and $50 to other counties. Licenses issued by secretary of state.

LIENS on buildings are given for labor and material. All working under contractor must notify owner in 30 days and file claims in 6 months with town clerk.

CONNECTICUT.

Indian name meaning "Long River," called "Wooden Nutmeg State." One of original 13 states explored by the Dutch settlers of Manhattan Island, 1615, by whom settlement was made, 1633, at Hartford, sold soon after to English. Hartford, Windsor and Wethersfield settled by colonists from Massachusetts, 1636. Saybrooke united with Connecticut, 1644. New Haven was settled, 1644, and united with Connecticut, 1665, under charter of 1662, from King Charles. Surrender of charter demanded by Andros, 1687, but was concealed in what became historical as the "Charter Oak" tree. Andros ruled as a despot until deposed and imprisoned, May 9 1689. Charter remained intact; and

formed the constitution of the State until the adoption of the present one in 1818. Connecticut instructed its delegates to the Continental, Congress, June 14, 1776, to propose that the united American colonies were free and independent states, absolved from all allegiance to the king of Great Britain, and thus forecast the declaration of independence. The state furnished

a very large quota of men to the Revolutionary armies. Yale College, founded 1701; Hartford capital till 1761. From 1701 to 1873 the general assembly met alternately at Hartford and New Haven. In the last named year the place of meeting was permanently fixed at Hartford. Union soldiers furnished, 55,864. Number counties, 8. Miles railroad, 994. State elections yearly

on same date as presidential election; elects 24 senators, 249 representatives, 4 congressmen, and 6 presidential electors. State senators hold 2 and representatives 1 year. Legislature meets yearly on Wednesday after first Monday in January. Convicts and persons unable to read not permitted to vote. School system superior; includes 3 colleges, with 160,000 books in libraries. School age 4 to 16 years. Legal interest, 6%. More cannot be collected. No penalty for usury.

POPULATION, 1880, 622,700; male, 305,782; female, 316,918; native, 492,708; colored, 11,547; Chinese, 123; Indians, 255.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Area, 4,845 sq. miles; average length, 86 miles; average breadth, 55 miles; seacoast, 110 miles. Surface diversified by hills and valleys, but less rugged than the other New England states. The Green Mountain range terminates in this state in a series of hills, the highest being about 1,000 ft. above the sea. The Housatonic, Thames, Quinnebaug, and Connecticut valleys extend N. and S., and contain much excellent land. The sea coast is indented by numerous bays and harbors, affording excellent anchorage. Soil, except in valleys, light and stony. Corn, oats, hay, wheat, tobacco and vegetables are the staple crops. Cleared land averages $40 and woodland $30 per acre. No valuable timber remains. Stone extensively quarried. Valuable iron mines exist.

CLIMATE.—Moderate and healthy; average temperature, summer, 72 deg. and winter, 28 deg. Occasionally the thermometer sinks below zero, considerable snow falls, summers warm. Rain fall including snow about 47 inches.

CHIEF INDUSTRIES.—Manufacture of hardware, clocks, silks, cotton, rubber, carpets, woolens, arms, sewing machines and attachments, dairying, quarrying, agriculture, etc. Total number of different industries, 4,488.

PRINCIPAL CITIES.—Hartford (capital, and noted for banking and insurance business); pop. 1880, 42,015. New Haven, "City of Elms," seat of Yale College; pop. 62,882. Bridgeport, noted for manufacture of fire-arms and sewing machines; pop. 27,643. Waterbury, important manufacturing city; pop. 17,806. Fairfield, Middletown, New Haven, New London and Stonington are ports of entry.

PROPERTY EXEMPT from execution: necessary apparel, bedding, furniture and provisions, arms, implements of trade, stock to value of $150. Horse, saddle and buggy, with harness of practicing physician not to exceed $250; sewing machine, library to $500, boat to $200. No homestead. Assignments without preference allowed, but do not discharge debt. Wages to $100, accruing within 3 months preferred. Suits for land barred after 15 years, on bonds and non-negotiable notes after 5 years, on contracts after 6 years, for slander, express contracts (unwritten) after 3 years, for damage for loss of life after 1 year. Wife's property exempt from husband's debts; she can do business, sue and be sued separately. Arrest for fraud, concealment, removal and refusal to pay admitted or judgment debts.

LICENSE CHARGES.—None.

LIENS are given on boarders' effects for board after 60 days; for material (over $25 worth) if statement is filed with town clerk or secretary of state, if supplied to a railroad, in 60 days and suit begun in 2 years. Liens for labor and material furnished vessels must be filed in 10 days. Judgments are liens on real estate.

NEW YORK.

One of the thirteen original states; named for Yorkshire, Eng. Called the "Empire State." Explored by Henry Hudson, Sept., 1609, who sailed up the river to which he gave his name. Two months earlier Samuel de Champlain discovered and named Lake Champlain. Holland owned the territory. The Dutch settled on Manhattan Island, 1614. Country called "New Netherlands." Manhattan Island purchased from Indians for $24, 1626. Indian troubles 1640–45. Swedish settlements on the Delaware incorporated with the New Netherlands, 1655. England claimed the country as part of Virginia; captured Manhattan (New Amsterdam) August, 1664, and named it New York. Dutch regained possession, held it a few months, and permanently transferred it to England; New York the battle-field of the French-English war, 1754; was prominent in the Revolution. The last royal governor was forced to flee, Oct., 1775. In Feb., 1776, Americans occupied New York city; British regained control in Aug., and held Manhattan Island until Nov. 25, 1783. Burgoyne's surrender at Saratoga Oct., 1777, the first great triumph over British tyranny. West Point fortified 1777–78. New York city capital of the colonial government until the Revolution, and state capital 1784 to 1797, when Albany was made the capital. It was also the seat of the United States government 1785 to 1790. During war of 1812–14 border towns of New York attacked by the British. First State constitution adopted 1777, revised 1801, 1821 and 1846; slavery abolished 1817. Boundary question with Vermont, Connecticut and Massachusetts settled 1791. Union soldiers furnished, 448,850; number counties, 60; custom districts, 10; first railroad, Albany to Schenectady, 1783; miles of railroad, 7,812; miles canal, 900. State officers elected every 4 and senators (32 in number) every 2 years; representatives (125 in number), yearly, on same day as presidential election. Legislature meets first Tuesday in Feb., yearly; congressmen, 34; presidential electors, 36. Election betters and bribers and convicts excluded from voting. School system superior; includes 28 colleges. School age, 5 to 21 years. Legal interest, 6%; usury forfeits principal and interest.

POPULATION, 1880, 5,082,871; male, 2,505,322; female, 2,577,549; native, 3,871,492; Indians, 819; white, 5,016,042; Chinese, 907.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 410 miles; extreme width, 311 miles; area, 47,620 sq. miles; 30,476,800 acres; water frontage, 900 miles; surface, varied. The narrow belt east of the Hudson valley is intersected by spurs of the Hoosac and Green mountains; the rolling table lands to the west are traversed by the Blue Ridge, Highland, Catskill, Helderberg and Adirondacks. The Hudson, rising in the Adirondacks, and flowing south over 300 miles to New York bay, is the chief stream. The Allegheny and its tributaries drain the S. W., and the Susquehanna the southern central division. The Mohawk is the chief affluent of the Hudson. The state is noted for the beauty of its lakes. In the west are Chautauqua and Cattaraugus; in the central division Canandaigua, Cayuga, Onondaga, Oneida and others having the Oswego river for their outlet. Long, Manhattan and Staten Islands form important divisions of the state. The soil is also varied, and agriculturally the state is very rich. Cleared land averages $60 and

woodlad $40 per acre. Considerable forests yet remain. The production of corn, wheat and dairy products is very large. The state ranks first in value of manufactures, soap, printing and publishing, hops, hay, potatoes, buckwheat and milch cows; second in salt, silk goods, malt and distilled liquors, miles railway and barley; third in agricultural implements, iron ore, iron and steel, oats and rye.

CLIMATE, diverse; mean annual temperature for the state, 47 deg. In the Adirondacks the annual mean is 39 deg.; in the extreme south it is 50 deg.; average rainfall 43 in., including snow, the fall being greatest in the lower Hudson valley, and smallest (32 in.) in the St. Lawrence valley. Range of temperature, 10 deg. below to 100 above zero.

PRINCIPAL CITIES.—New York City, pop., 1,206,299; Brooklyn, pop. 566,663; Buffalo, "Queen City of the Lakes," pop. 155,134; Rochester, pop. 89,366; Syracuse, pop. 51,792; Albany (capital), pop. 90,758.

LEADING INDUSTRIES.—Manufacturing of all kinds, agriculture, dairying, the trades, etc.

PROPERTY EXEMPT from execution: Necessary furniture, tools and team; professional implements, furniture and library to value of $250; 90 days' food for team, 60 days' earnings if necessary to family; homestead to value of $1,000; exemption extends after death till youngest child is of age; notice must be recorded of intention of making it a homestead or by acts done showing intention to make it such. No exemption against debts prior to making of homestead or against purchase money for same. Assignments with preference may be made, and on petition of two-thirds creditors in amount debtor discharged. Suits to recover real estate upon sealed instrument or judgment, barred after 20 years; on contract, for injury to person or property, to establish a will, or for fraud, after 6 years; for negligence, after 3 years; for libel, etc., after 2 years, and all other actions after 10 years. No imprisonment for debt. Arrest may be made in some cases where fraud enters.

LICENSE CHARGES per year: Peddlers on foot, $20; with horse, $30; with more than one horse, $50. License issued by Secretary of State.

LIENS to value of labor or material given against premises, or if same exceed contract price to amount of latter, if filed in 30 days, and proceedings are begun in 1 year thereafter. Judgments are liens on real estate for ten years.

NEW JERSEY.

One of the thirteen original states. Named for Isle of Jersey. Settled first by Dutch, from New Amsterdam, at Bergen, 1620, by Swedes east of the Delaware, 1638. Latter dispossessed by Dutch, 1655. Country acquired by England, 1604. Subsequently transferred by Duke of York to Lord Berkeley and Sir G. Cartaret. Submitted to Dutch, 1673. Reverted to England, 1674, and governed till 1680 by Sir E. Andros; governed 1682 to 1702 by William Penn. Previous to 1682 the state was divided into two distinct governments—East Jersey and West Jersey. From 1702 to 1788 New Jersey was subject to New York, but kept its own assembly. Separated in the latter year and received independent government. Battles of Trenton, Princeton, Monmouth and others fought within its borders during the Revolution. State Constitution adopted, 1776; revised, 1844, and amended in the present decade. United States Constitution unanimously adopted Dec., 1787; capital established at Trenton, 1790. A slave state till 1860, when but eighteen slaves remained and it was counted a free state; Union soldiers furnished, 75,814. State contains 21 counties and has 1,890 miles railroad. State elections annual; same date as congressional and presidential; number of senators, 21; representatives, 60; meeting of legislature, 2d Tuesday in January; term of Senators, 3 years; representatives, 1 year; number of electoral votes, 9; Congressmen, 7.

Paupers, idiots, insane and convicts excluded from voting. Number colleges, 4; schools good; school age, 5-18. Legal interest 6%; usury forfeits entire interest.

POPULATION, 1885, 1,278,033; male, 629,922; female, 648,111; native, 979,416; foreign, 298,617; white, 1,192,017; colored, 86,016; Chinese, 170; Indians, 74.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length north and south, 158 miles; width, 38 to 70 miles; area, 7,455 square miles or 4,771,200 acres; forty-third state in size. Atlantic coast, 128 miles; Delaware Bay coast, 118 miles. Greatest elevation at north, where Blue Mountains reach 1,000 to 1,800 feet above the sea. The Kittatinny Valley, 10 miles wide, separates these from the

Highland range 900 to 1,500 feet high. The famous Palisades of the Hudson at the northeast are 600 feet high. Toward center state slopes to a rolling plain, and at south becomes flat and low. Hudson river forms the eastern border, Delaware bay and river the western; Raritan, New York and Newark bays afford fine harbors. Cape May to Sandy Hook coast bordered by strips of sand inclosing bodies of water which float vessels of light draft. Delaware Water Gap and Falls of Passaic are the natural wonders of the state. At the north are picturesque lakes and the coast is famous for watering places, including Cape May, Atlantic City, Long Branch, etc. The soil ranges from fair to very good. Cleared land averages $80 and woodland $60 per acre; hay the best crop. Other staple crops are potatoes, wheat, corn, rye, buckwheat, cranberries (in Burlington, Ocean and Atlantic counties), fruit and garden produce (central region vast garden); little woodland valuable for timber remains. Iron and fertilizing marls are abundant.

CLIMATE variable; temperature averages, summer, 68 deg. to 75 deg.; winter, 31 deg. to 38 deg. Range of temperature from about zero to 100 deg. Rainfall, including snow, 46 inches, reaching 50 inches in the highlands, and falling to 40 inches at the south. Highlands and seashore healthy. Ague and malarial fevers in the lowlands.

PRINCIPAL CITIES.—Newark, Perth Amboy, Great Egg Harbor, Tuckerton, Bridgeton and Lumberton are ports of entry. Newark, pop. 152,988; Jersey City, 153,513 Trenton (capital), 29,910; Paterson, 63,273; Elizabeth, 28,229; Hoboken, 30,999; Camden, 41,659.

CHIEF INDUSTRIES.—Manufacture of fabrics, jewelry, clay wares and brick, flour, crystals, fishing, oyster fishing, gardening, agriculture, marl and iron ore digging, etc.

PROPERTY EXEMPT from execution for debt: goods and chattels to the value of $200, wearing apparel, homestead worth not to exceed $1,000. Assignments cannot give preference to any creditor. Creditors who prove against a debtor who has assigned are barred further action and the debtor is released. Those who do not prove are not barred. Preference may be given by mortgage or confessed judgment. Action to recover real estate barred in 20 years, to recover rents on sealed lease in 16 years, on note in 9 years, on accounts in 4 years, and for slander in 2 years. Arrest for debt may be made on affidavit alleging fraud done or contemplated. Wife's property exempt from husband's debts. Bonds of state and United States, property of state, counties, towns, etc. Property owned and taxed out of the state, if tax on same has been paid within a year of the time of assessment; institutions of learning, religion and charity; libraries (public), cemeteries and their endowments and the assets of corporations relieved of tax by charter from the state.

LICENSE CHARGES—per year—Peddlers on foot, $8; with horse, $15; with $2 and $3.50 in each case extra as fees.

LIENS—wages to amount of $300 for each employe are preferred claims. Liens for labor and material must be filed against the property within a year and summons to enforce the same issued. Judgments are liens on real estate.

PENNSYLVANIA.

One of the thirteen original states, named for Wm. Penn. Called the "Keystone State." Settled first by Swedes at Chester, 1638. Swedes subjected by Dutch, 1655, and territory became part of New Netherlands. Captured by English, 1664. Recaptured by Dutch, 1672, but fell to English again in a few months. All territory west of Delaware river granted to Wm. Penn, 1681, by Charles II. of England. Philadelphia founded, 1682. Pennsylvania became battle-ground of French-English wars, 1746-1760. Braddock's Field and Fort Du Quesne (Pittsburgh) most notable of the fights. Indians conquered, 1764. Pennsylvania most conspicuous in Revolution. Proprietary government abolished and independent state formed 1776. Continental Congress met and declaration of independence signed at Philadelphia. Notable events: Defense of Philadelphia, battles of Brandywine, Germantown and Valley Forge. State Constitution drawn 1790; revised 1838; amended 1850, 1857, 1861-4, and 1873 new one adopted. "Whisky Insurrection" or revolt against excise law, 1794. Capital moved from Philadelphia to Lancaster, 1799, and to Harrisburgh, 1812. State invaded three times by confederates, 1862, 1863, when battle of Gettysburgh was fought, and 1864, when Chambersburg was destroyed. Union soldiers furnished, 337,930. Number counties, 67; miles railroad, 7,546. State elections annual, same date as presidential; number senators, 50; representatives, 201; sessions biennial, meeting first Tuesday in Jan., hold 150 days; term of Senators, 4 years; representatives, 2 years; number electoral votes, 30; congressmen, 28. Non-taxpayers and bribers excluded from voting. Number colleges, 26; school age, 6-21; school system good. Legal interest, 6%; usury forfeits excess of interest.

POPULATION.—1880, 4,282,891; male, 2,136,655; female, 2,146,236; native, 3,695,062; colored, 85,535; Chinese, 464; Indians, 184.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length east and west, 300 miles; width, 176 miles; area, 44,985 sq. miles; 28,790,400 acres. Lake frontage 60 miles. Surface very diverse and scenery varied from the commonplace to the beautiful and sublime. Level at the southeast, hilly and mountainous toward the center, and rolling and broken at the west and southwest. From the Delaware river on the east rises gradually from five or ten to 1,000 feet at the foot of the Blue Ridge. Cumberland valley a fine region. The Allegheny and Kittatinny mountains occupy the central portion. The western division (half the state) is a table land. Principal streams Susquehanna and its tributary the Juniata; Delaware (rises in Catskills) a tide water river as far as Trenton, 130 miles from mouth; Alleghany and Monongahela, which unite to form the Ohio. Soil varies from barren hills to sections of great fertility. Many superb farms. Cleared land averages $45; woodland $30 per acre. Much good timber remains. Farms average 100 acres. Oil, coal (anthracite at east, bituminous at west) iron, copper, kaolin, building stones, salt abound. Rye, corn, wheat, buckwheat, potatoes, vegetables, hay, oats, tobacco are staple crops. Dairying and stock flourish.

CLIMATE in mountains severe in winter, with much snow; summers pleasant; summers hot on the Delaware, reaching 100 deg.; summers long in Susquehanna valley; west of mountains summers hot and of moderate length; winters cold; average

winter temperature, 34 deg.; summer, 74 deg.; rainfall, including snow, averages 42 inches; climate healthy.

CHIEF CITIES.—Philadelphia, second city in United States, contains mint and navy yard; pop., 846,984. Pittsburg, extensive manufacturing city; pop., 156,389. Harrisburg, capital; pop., 30,762. Philadelphia, Pittsburg and Erie are ports of entry.

INDUSTRIES.—Pennsylvania is the great iron, oil and coal state. The other industries include agriculture and kindred pursuits, lumbering, manufacture of paper, woolens, liquors, implements, machinery, etc.

PROPERTY EXEMPT from execution: Wearing apparel, bibles, school books, sewing machine and $300 in personal or

real property. No exemption against judgments not exceeding $50, obtained for labor. Assignments may be made, without preference, and debtor is not released. Suits to recover land barred after 21 years; on judgments, mortgages and sealed instruments after 20 years; on notes and accounts after 6 years; for slander after 1 year; for personal damages after 2 years. Wife's property exempt, except earnings, which, by proper application, may also be exempted. No imprisonment for debt. Property exempt from tax, estates of religious and charitable institutions, state, county and municipal property, all manufacturing companies, except makers of gas and spirituous, malt or other liquors.

LICENSE CHARGES.—Per year, peddlers on foot, $8; with cart, $16; with two-horse cart or wagon, $25. Jewely peddlers, $200 to state and $50 to each county, except Providence, where charge is $100.

LIENS for wages and material hold if filed within six months, and are good five years. Judgments are liens on real estate for five years.

DELAWARE.

One of the thirteen original states. Named for Lord De la Ware, who entered the bay 1610. Called "The Diamond State." First state to ratify Federal constitution. Visited 1609 by Henry Hudson. Settled by Swedes 1638, who bought from Indians, built a fort, and called the country "New Sweden." Swedes took Duck fort at Casimer (New Castle) 1654, and were compelled, 1655, to swear allegiance to Holland. Ten years later Sir R. Carr took the settlements, and England held them for nine years. Dutch regained possession 1673, but treaty of Westminster gave the district to England 1774, and it was ruled by a representative of Duke of York, to whom it was granted. Transferred to William Penn 1682 by Duke of York. Independent assembly created 1703, meeting at New Castle, but was governed by governor of Pennsylvania till 1776, when the colony declared itself independent. Took vigorous part in the revolution. State Constitution adopted 1776. A new one 1792, which was revised 1831. Delaware was a slave state. Slaves 1860, 2,000. Union soldiers furnished, 12,284, the biggest percentage of any state. Contains three counties. Miles of railroad, 306. All elections Tuesday after first Monday in November; number senators, 9. representatives, 21; legislature meets in odd-numbered years, first Tuesday in January; holds 21 days; term of senators, 4 years; of representatives, 2 years; number electoral votes, 3; number congressmen, 1; idiots, insane, paupers and criminals excluded from voting; colleges at Newark and Wilmington, school age, 6-21; schools fair; legal interest rate, 6; usury forfeits the principal.

POPULATION, 1880, 146,608; male, 74,108; female, 72,500; native, 137,140; white, 120,160; colored, 26,442.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length north and south nearly 100 miles; width, 10 miles at north, 36 at south. Area 1,950 square miles, or 1,248,000 acres. Available area large. Northern portion rolling, but free from large hills. Scenery beautiful. Southern portion level and sandy, with tre-

quent cypress marshes. Coast low and swampy with lagoons separated from sea by sand-beaches. Streams flow into Chesapeake and Delaware bays and are small. Tide reaches to Wilmington. The soil is good and the state of cultivation superior. Cleared land averages $45 per acre, and wood-land $40. Staple crops, corn, wheat, peaches, berries, garden vegetables, sweet potatoes. Iron is found, but is no longer worked.

CLIMATE mild. Tempered by sea breezes. Average temperature, winter, 32 deg. to 38 deg.; summer, 72 deg. to 78 deg. Rainfall 48 to 50 inches. At north health excellent. Some malaria on the low lands bordering the swamps at the south.

CHIEF CITIES.—Wilmington, pop. 42,478. Dover, capital. Newcastle, 6,000. Breakwater protecting Delaware Bay at Cape

Henlopen, greatest work of its kind in America, cost the United States $2,127,400, and was over 40 years in course of construction.

INDUSTRIES.—Agriculture and kindred pursuits, manufacture of flour, lumber, cotton, iron, steel, leather, etc., shipbuilding, fishing, canning and preserving. Total number different industries, 750.

PROPERTY EXEMPT from execution, books, pictures, wearing apparel, tools and implements to value of $75 in Newcastle and Sussex counties, and $150 in Kent. Other household goods to value of $200 in New Castle and $150 in Kent are exempt, and sewing machines and wages are exempt in New Castle. Assignment cannot prefer any creditor, and does not release the debtor. Suits involving title to land are barred in 20 years, on notes, etc., in 6 years, on accounts, etc., in 3 years. Arrests for debt may be made upon affidavit of intention to remove property from state and defraud creditors. Wife's property acquired in any way but from husband is exempt from his debts.

LICENSE CHARGES per pear, peddlers on foot, $50; if a citizen, $8; with one horse, $16; two horses, $30. and $10 additional for each horse above 2; with horse and wagon, $25; two horses and wagon, $35. To sell clocks, $50. Tinware $10, with cart $20.

LIENS.—Wages and materials to the amount of $25 are liens; statement of claim must be filed in 90 days, or in 30 days by contractors. No priority of liens. Judgments are liens on real estate for 20 years. One month's wages to amount of $50 is a lien on real estate in New Castle county. Executions levied are liens for 3 years.

MARYLAND.

One of the thirteen original states, named for wife of Charles II of England. Settled 1631 by Captain William Clayborne and other Virginians. Granted by Charles I to Cecil Calvert (Lord Baltimore) June 20, 1632. First English colony landed March, 1634. Clayborne's party driven out. The latter, by aid of Virginia Non-Conformists, 1642, took control of the territory. Proprietors regained possession 1646. Were again dispossessed by Puritan element for three years, and again got control. Government of colony assumed by King William III, 1688. Baltimore laid out 1730. Proprietary government overthrown December, 1774. Constitution adopted November, 1776; amended 1802, 1810, 1836, 1845, 1851; new constitution adopted 1851; again in 1864, and present one 1867. Federal congress met at Annapolis 1783, when Washington resigned command of army. Federal constitution ratified April 28, 1778. Fredericktown and other places burned in war of 1812, and Fort McHenry bombarded. Battles of Bladenburg and North Point fought. First blood of civil war shed at Baltimore April 19, 1861. Legislature opposed war April 26, 1861, but passed resolutions favoring the South. Battle of Antietam Sept. 16 and 17, 1862. Slavery abolished 1864. Union soldiers furnished, 46,638; No. counties, 23; miles railroad, 1,082. All elections Tuesday after first Monday in Nov.; number Senators, 26; Representatives, 91; sessions biennial, in even-numbered years; meet first Wednesday in Jan. and hold 90 days; term of senators, 4 years; of representatives, 2 years. Number of electoral votes, 8. congressmen, 6. Insane, convicts and bribers excluded from

voting. Number colleges, 11; school age, 5-20; school system fair. Legal interest 6%; usury forfeits excess of interest.

POPULATION.—1880, 939,943; male, 462,187; female, 472,756; native, 852,137; colored, 210,230. Slaves, 1860, 87,189.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length east and west, 196 miles; width, 8 to 122 miles. Area, exclu-

sive of Chesapeake bay, 9,860 sq. miles. Area of the bay, 2,840 sq. miles. Acreage of state, 6,310,400, water surface large. Western and northern sections mountainous and broken. Peninsular region sandy and low, as is also section between the Chesapeake and Potomac. Mountains, the Blue Ridge and Alleghenies. Scenery fine, rising often to sublime. Chesapeake bay almost divides the

state. Tide-water coast nearly 500 miles. Chief navigable rivers, Potomac, Susquehanna, Patuxent, Patapsco, empty into the bay. At the west is the Youghiogheny. Many small streams, bays and inlets. Numerous small islands in Chesapeake bay. Soil varies from very poor to very good. Cleared land averages $22.50, and woodland $14 per acre. The average value of latter lowered by mountain sections. Considerable good timber remains. Enormous coal fields west. Copper is found in Frederick and Carroll counties; iron ore in Allegany, Anne Arundel, Carroll, Baltimore, Frederick and Prince George's counties. Great oyster, fish, fruit and vegetable producing state. Oyster beds most valuable in Union. Wheat, corn, oats, buckwheat and tobacco staple crops. Opportunities for capital are yet excellent.

CLIMATE.—Mild, agreeable and healthful; some little malaria in lowlands. Temperature softened by ocean. Winter averages 37 deg., summer, 78 deg. Rainfall, 42 inches.

CHIEF CITIES.—Baltimore, port of entry; pop. 332,313. Annapolis, capital; contains United States Naval Academy; pop. 5,744. Cumberland, pop. 10,693.

CHIEF INDUSTRIES.—Agriculture and fruit growing, oyster and other fishing, canning, coal, iron and copper mining, manufacturers of cotton goods, etc.

PROPERTY EXEMPT from execution: Wearing apparel, books, tools not kept for sale and $100 in other property. Assignments may be made, and if all property is surrendered and no fraud has been perpetrated, debtor is discharged. No preferences can be given by the assignor. Suits to recover land barred after twenty years, on accounts, etc., after three years, and on notes, bonds, etc., after twelve years. Wife's property exempt. Husband not liable for wife's debts prior to marriage. No arrest for debt. Wages are not attachable until due, and $100 is then exempt.

LICENSE CHARGES.—Per year, peddlers on foot, $40; with one horse, $50; with two horses, $70, in each county. Drummers may be charged per cent on stock of house; not enforced. Cumberland, $1 per day.

LIENS.—Wages and materials unpaid are liens for five years, if statement is filed in six months. Three months' wages are preferred liens. Kent, Calvert and St. Mary's counties are exempt from the lien laws, except against shipping. Judgments are liens on real estate. Liens against ships are good but two years.

DISTRICT OF COLUMBIA.

Named for Columbus. Fixed as seat of U. S. government 1790 by act of Congress. Formed out of Washington Co., Md. (64 sq. mi.) and Alexandria Co. Va. (36 sq. mi.) Government removed to District, 1800. Captured by British 1814, and capitol, executive mansion and congressional library burned. Virginia portion ceded back to that state 1846. Slavery abolished 1862. No fighting in District during civil war. Governed by Congress till 1871, when a legislative body of 33 (11 appointed by the president and 22 elected) was created. Executive officers still appointed by president. Officers appointed are paid by the United States; those elected by the District. Citizens of District have no vote for national officers. Schools superior. Legal interest, 6%; by contract, 10; more forfeits entire interest. **Population,** 1885, 203,459. Miles railroad, 18. Surface made up of flats and hills. Similar in all features and products to Southern Maryland. Cities—Washington (capital U. S.), pop. 187,928; Georgetown, pop. 12,578. **Exempt** from execution: Furniture, etc., $300, tools or books, etc., $300, stock for business, $200, wages to $200. Assignments can prefer. Actions for account void after 3; on note after 12 years. Wife's property exempt. No arrest for debt. **Liens** hold for board, labor and material. **Drummers' License** $200 per year in Washington.

VIRGINIA.

One of the thirteen original states; named for Queen Elizabeth, the Virgin Queen; called the "Old Dominion" and "The Mother of Presidents." First English settlement in America, 1607. Controlled by the London company. Trouble with Indians, 1609 to 1624, when company dissolved and colony became subject directly to the crown. Slavery introduced 1619. Bacon's Rebellion against restriction of franchise and high taxes, 1676. Williamsburgh founded 1699, where general assembly met, 1700. Active in French War of 1754, and in Revolution and subsequent steps toward founding the Union, Virginia won the title of "First of the States." British burnt Norfolk 1779, and Richmond 1781. Yorktown surrendered Oct., 1781, practically vanquishing England. State Constitution adopted 1776, and a new one 1869. United States Constitution ratified June 25, 1788. Capital fixed at Richmond 1779. State seceded May 7, 1861, and capital of Confederacy moved to Richmond from Montgomery, Ala. Arsenals and navy yards seized immediately after secession. West Virginia separated 1861. Scene of gigantic energies of the war. Bull Run, the Wilderness, Cold Harbor, Fredericksburg, Port Republic and many other famous battles were fought on Virginia soil. Lee surrendered at Appomattox April 9, 1865, ending the war. Fourteenth and fifteenth amendments to United States Constitution ratified 1869. State returned to the Union Jan. 26, 1870. Originally included all the region known as Territory of the Northwest. Number of counties, 100. All elections Tuesday after the first Monday in November; number of senators, 40; representatives, 100; sessions of legislature, biennial, in odd-numbered years, meeting first Wednesday in December; holds 90 days; term of senators, 4 years: representatives, 2 years. Number electoral votes, 12; Congressmen, 10. Lunatics, idiots, convicts, duelists, United States army and non-taxpayers of capitation tax excluded from voting. Number colleges, 7; schools, 4,502; school age, 5-21; school system fair. Legal interest, 6%, by contract 8%; usury forfeits all over 6 per cent. Miles of railroad, 2,894.

POPULATION, 1880, 1,512,565; male, 745,589; female, 766,976; native, 1,497,869; white, 880,858; colored, 631,616; Indians, 85; slaves, 1860, 490,865.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Greatest length east and west, 445 miles; greatest width, 190 miles; area, 40,125 square miles, 25,680,000 acres, exclusive of water area. Coast line, 130 miles; tidal frontage, 1,556 miles. State divided into 6 sections parallel with coast and extending back from the same in the order named: Tidewater; Middle, Piedmont, Blue Ridge, Valley and Appalachian. The nature of these sections is indicated by their titles. The scenery of the state is both beautiful and grand. The Peaks of Otter, the Natural Bridge and the Luray caverns are among its natural wonders. The mountains vary from wild to rugged. The Alleghany and Cumberland mountains at the west are the most notable. The broken districts are, however, interspersed with valleys. The principal rivers are the Potomac, Rappahannock, Rapidan, James, York, Elizabeth. These have many tributaries, and water and water powers are abundant. The soil is very fertile in the valleys, good on the table-lands and poor to middling on the mountains.

The state is rich in iron, gold, salt, coal, marble, slate, zinc, lead, stone, timber and other natural resources as yet little developed. Much good farming land is untilled. Cleared land averages $10 and woodland $6 to $7 per acre. The opportunities for homes and enterprise are inviting. All cereals, tobacco, peanuts (state ranks first in this crop and second in tobacco), fruits, grapes and vegetables are extensively raised. Stock thrives.

CLIMATE varies owing to difference in elevation, but is genial and healthful, cool in mountains and warm in lowlands in summer; winters of moderate length, and seldom severe; winter temperature averages 44, summer 78 degrees. Rainfall, including snow, averages 44 inches, being heaviest on the coast.

CHIEF CITIES.—Richmond (capital), pop., 63,600; pop.

of Norfolk, 21,966; of Petersburg, 21,656. Hampton Roads one of best harbors on coast. Seven ports of entry.

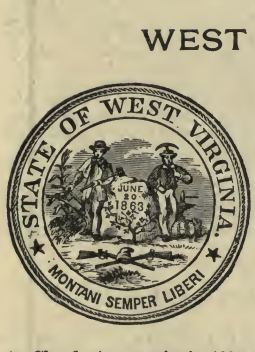
INDUSTRIES.—Half population engaged in agriculture, balance in quarrying, ship-building, lumbering, the trades, iron working, meat packing, tanning.

PROPERTY EXEMPT from execution not to exceed $2,000 in value in real or personal property or money to any householder or head of family, and besides books, pictures to the value of $100, wearing apparel, beds and bedding, 3 steers, 1 cow, 1 horse, household furniture to a limited quantity, tools of trade to the value of $100; provisions for family, sewing machine, and to farmers, in crop season, a yoke of oxen or a team and farm implements. In assignment creditors may be preferred, but the debtor is not released. Suits involving real estate barred after 15 years; on bond or contract under seal, after 20 years; on indemnity bond, after 10 years; on accounts, after 2 years, and on all other actions after 5 years. Wife's property and income from same exempt from husband's debts. No imprisonment for debt unless debtor attempts to leave state, when creditor may have him arrested.

LICENSE CHARGES.—Per year—Peddlers on foot, $50; sample merchants, $25. Drummers tax, $75 per year.

LIENS for labor and materials, for advances made on crops and on baggage and other property of boarders are enforcible.

WEST VIRGINIA.



Originally part of Virginia. Called "Pan Handle State." History up to 1861, same as that of Virginia. Refused to secede April 22, 1861. F. H. Peirpoint, elected Governor, June 20, 1861. State called "Kanawha," but name changed in December. State Constitution adopted 1862, and Capital fixed at Wheeling, and moved to Alexandria, 1863; the authority of the state extending to the varying territory of Virginia, held by Union troops. Admitted as state, June 20, 1863, and Wheeling again made the Capital. Capital changed to Charleston, 1870. Moved again to Wheeling 1875, and to Charleston again in 1884. Constitution amended, 1872; number Union soldiers furnished, 32,068; state advanced rapidly in wealth; number counties, 54; miles railroad, 1,026. Governor and state officers elected quadrennially, and legislature every two years, on second Tuesday in October; number senators, 26; representatives, 65; sessions biennial, in odd-numbered years, holding 45 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 6; congressmen, 4; number voters, 139,161; native white, 123,569; colored, 6,384. Insane, paupers and convicts not voting. Flourishing free school system; school age, 6-21. Legal interest, 6%; by contract, 6; usury forfeits excess of interest.

POPULATION, 1880, 618,457; male, 314,495; female, 303,962; native, 600,192; white, 592,537; colored, 25,886; Indians, 29; increase in population 1870 to 1880, 38 per cent; number slaves, 1860, 18,371.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 241 miles; greatest width, 158 miles; area, 24,645 sq. miles, 15,772,800 acres. Surface mountainous with fertile valleys;

the Alleghenies principal range. Some high peaks. Scenery fine, and much visited by tourists. Western part hilly, but gradually descends from 2,500 feet above the sea toward the Ohio river, where the elevation is 800 to 900 feet. The chief rivers are the Ohio, Potomac, Big Sandy, Big and Little Kanawha, Guyandotte and Monongahela, all navigable, and are being improved by government aid, giving easy access to markets. Smaller streams are numerous. Much of the state is virgin forest densely clothed with oak, walnut, poplar, ash, and other timber trees. Mineral springs abound. The soil, where not mountainous, is excellent. Mineral wealth, including coal, oil, iron, salt, is prodigal. Staple products include the minerals named, sheep, hogs, tobacco, wheat, corn, dairy products, fruit, wine, lumber. Petroleum is extensively produced in Ritchie, Pleasants, Wood and Wirt counties. The state ranks fifth in salt and coal; seventh in buckwheat, iron and steel. Cleared land averages $22.50; woodland $9 per acre.

CLIMATE moderate; average temperature, winter 30 deg.; summer, 70 deg. Elevation reduces heat which in the valleys averages 76 to 78 deg. Average rainfall 42 to 45 inches. Health is excellent.

CHIEF CITIES, Charleston, Capital; Wheeling, pop. 30,737. Parkersburg, pop. 6,582; Martinsburg, pop. 6,335.

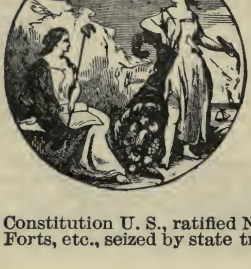
CHIEF INDUSTRIES. Sixty per cent. of laborers engaged in agriculture, balance in mining, iron making, lumbering, manufacturing, etc.

PROPERTY EXEMPT from execution: homestead to value of $1,000, where acquired as such by will or deed, or where intention is declared to keep same as a homestead by recorded deed; personal property to value of $200 to married men or widows with children, and $50 worth of tools in all cases. Assignments may be made with preferences but do not release debtor. Action on all open accounts barred in 3, other claims in 5, and real estate judgments and bond claims in 10 years. Wife's property, unless a gift of husband, not liable for his debts. A married woman may contract debts separate from husband, and her separate estate is solely chargeable with them. No imprisonment for debt.

LICENSE CHARGES. Peddlers on foot, $10; with team, $25 per year.

LIENS for labor and materials must be filed in 60 days. Notice must be given employer when work is done for contractor in 30 days. Suit must be brought in 6 months. Judgments are liens on real estate.

NORTH CAROLINA.



One of the thirteen original states. Named for King Charles II., of England. Called "Old North State," "Fur State" and "State of Turpentine." Discovered by Lord Raleigh, 1584. Settled by English, 1650, and then known as Albemarle and united with South Carolina. Warred with the powerful native Tuscaroras, 1712, and expelled them 1713. Separated from South Carolina, 1729, First state to declare itself independent of England at Mecklenburg, May, 1775; State constitution adopted Dec., 1776. Oct. 7, 1780, battle of King Mountain; March 15, 1881, battle of Guilford Court House. Constitution U. S., ratified Nov. 1789. State seceded May 21, 1861, Forts, etc., seized by state troops. Coast section scene of sharp

fighting during civil war. State re-entered Union June, 1868. Amendments to U. S. Constitution adopted March, 1869. Number of counties, 96; miles of railroad, 2,028. All elections Tuesday after first Monday in Nov.; number senators, 50; representatives, 120; sessions biennial, in odd-numbered years, meeting Wednesday after first Monday in January; hold 60 days; terms of senators and representatives, 2 years each; number electoral votes, 11; number congressmen, 9. Convicts are excluded from voting. Public school system adopted, 1840; at present over 2,000 public schools in operation; school age, 6–21; separate schools for whites and blacks. Legal interest rate, 6; by contract, 8; usury forfeits interest. Rate of tax less than 50c. on $100.

POPULATION, 1880, 1,399,750; male, 687,908; female, 711,842; native, 1,396,008; colored, 531,277; Indians, 1,230. Slaves, 1860, 331,059.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Greatest length e. and w. 453 miles; greatest width, 185 miles; area, 52,240 square miles, or 33,433,600 acres, less area water surface. Coast line 423 miles with many harbors. Western section mountainous, containing Alleghenies and Blue Ridge mountains. Elevation 3,500 to nearly 7,000 feet (Klingman's peak). Other high points, Mt. Mitchell, 6,730 feet, Sugar mountain, 5,312 feet, and Grandfather mountain, 5,900 feet. Middle portion is hilly, but not mountainous. Coast region low, level and swampy. Land generally sandy, but of good quality and originally heavily timbered. Much virgin forest yet remains. Swamps extensive, most noted of them, the Great Dismal, north of Albemarle sound, contains 148,000 acres. Chief rivers, Roanoke, Chowan, Cape Fear, debouching in Albemarle sound; Tar and Neuse emptying into Pamlico sound, and the Yadkin and Catawba. Small streams abundant; water powers numerous; corn best crop; tobacco largest product; other staples, orchard products, sweet potatoes, rice, wheat, oats, peanuts, cotton, hay and vegetables in the order named. North Carolina ranks first in tar and turpentine; second in copper; third in peanuts and tobacco, and fourth in rice. Has rich deposits of gold and the baser minerals. Stone, slate, coal, marble, mica. Excellent fisheries. Natural resources but slightly developed. Ample opportunities for homes, enterprise and capital. Cleared land averages $10, and woodland $5 per acre. and much of excellent quality in the market below this average. Stock thrives. Scenery varied, ordinary, picturesque and grand. Wheat harvested June. Corn ripe in Sept.

CLIMATE varied, warm and moist in low sections; cool and dry in mountains, with all intermediate conditions. Average winter temperature, 49 deg.; summer, 78 deg. to 79 deg. Frosts light and seldom come till the end of fall. Rainfall, including some snow in mountains, 45 deg. Health good.

CHIEF CITIES.—Wilmington, pop. 13,446; Raleigh (capital), pop. 7,790; Charlotte contains assay office, pop. 4,473; pop. New Berne, 5,849.

INDUSTRIES.—Agriculture principal occupation. Fishing, manufacture of turpentine and lumber, mining, etc. Number of different industries, 3,800. Number boats engaged in fisheries, about 3,000. Copper mined, 1,640,000 lbs.

PROPERTY EXEMPT from execution: personal to value of $500. Homestead to value of $1,000. Assignment relieves debtor from imprisonment, but does not discharge debts. Preferences may be made. Suits to recover real estate barred after 30 years; after 21 years where adverse claim is set up; after 10 years on judgments or mortgages; after 7 years on Justice of the Peace judgments; after 6 years on official bond or for injury to real estate; after 3 years on contracts, or for fraud, and after 1 year for assault, libel, imprisonment, etc. Wife's property absolutely exempt from husband's debts. Arrests for debt may be made if cause is shown the court, upon affidavit, of intention of debtor to leave state or conceal himself or property.

LICENSE CHARGES.—Drummers $100 per year; $250 for sewing machine or liquor salesmen.

LIENS are given mechanics in all cases, and for materials when notice is given the owner before settlement with contractor and notice is filed. Agricultural laborers and persons making advances have liens on crop. Owners of studs or jacks hold liens and judgments are liens on real estate for 10 years.

SOUTH CAROLINA.

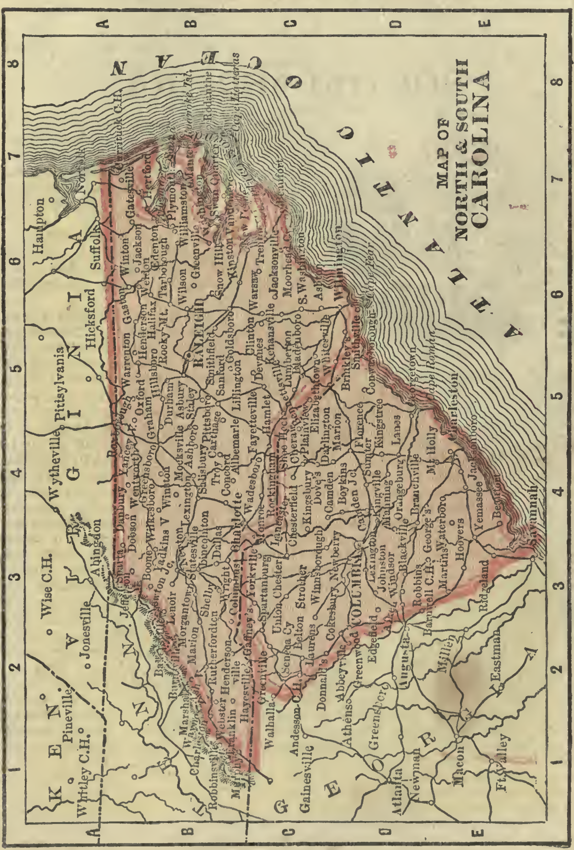
One of the thirteen original states; named for King Charles II. of England; called "Palmetto state." Settled by French Huguenots 1562 at Port Royal; abandoned. Created a province 1663. Permanently settled by English 1670, on Ashley river; Charleston platted 1680. A proprietary government under John Locke's constitution till 1729; separated from North Carolina 1729; revolutionary record, brilliant. English seized the territory, but were thrashed at Cowpens and Eutaw Springs, and penned up in Charleston. State constitution adopted March 26, 1776. United States Constitution ratified May 23, 1788. First railroad in United States using American locomotive, 1830. State adverse to high tariff, and passed nullification ordinance Nov. 19, 1882, at Columbia, declaring the tariff not binding on the citizens of the state. The affair compromised. First state to secede, Nov., 1860. Sumter bombarded April 12-13, 1861. Ordinance of secession repealed Sept., 1865, and slavery abolished. New constitution adopted 1868; re-entered the Union June, 1868. Number counties, 34; miles of railroad, 1,570. State, congressional and presidential elections, Tuesday after first Monday in November; State senators, 35; representatives, 124; sessions annual, meeting fourth Tuesday in November; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 9; number congressmen, 7. Insane, inmates of asylums, alms-houses and prisons, United States army and duelists excluded from voting. Number colleges, 9; school age, 6-16; school system, fair. Legal interest 7%, by contract, any rate.

POPULATION, 1880, 995,577; male, 490,408; female, 505,169; native, 987,891; white, 391,105; Indians, 131; slaves, 1860, 402,406.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Greatest length, 280 miles; greatest width, 210 miles; area, 30,170 square miles, or 19,308,800 acres, exclusive of water surface; coast line, 212 miles, with several good harbors. Many small islands, famous for "Sea Island cotton." Surface mountainous at west, traversed by Blue Ridge. Highest point, Table Mountain, 4,065 feet. Mountains descend rapidly to the "middle," or "sand ridge" section. This gives place to the coast section, extending inland over 100 miles, low and flat. Principal rivers, Savannah, navigable 130 miles, Great Peedee, Santee, and Edisto; many lesser streams. Magnificent water power, undeveloped. Scenery grand in mountains, ordinary elsewhere. Soil various, from medium to very rich. Forests extensive and valuable. Land, cleared or uncleared, averages $7 per acre; much is offered at $3 to $5. Rice and cotton, best crops. All other cereals, as well as vegetables, fruits, grasses and fibre crops grow well. Phosphate beds enormous; gold, mica, marbles of all colors; building stones found in large quantities. Turpentine, tar, lum-

ber and oysters largely produced. Stock thrives. Gold mines in Abbeville, Edgefield and Union counties; first mint deposits, $3,500, in 1827. White and variegated marbles found in Spartanburgh and Laurens counties. Splendid opportunities for homes or investment.

CLIMATE.—Temperature ranges 15 to 96 degrees F.; aver-



ages, summer, 82 degrees; winter, 51 degrees. Average rainfall, 48 inches, decreasing to the south. Health, good. Epidemics rare, and confined to seaports; resort for consumptives. Changes slight and infrequent; frosts rare.

CHIEF CITIES.—Charleston, pop., 1880, 49,984; port of entry; seat of a Catholic bishop. United States customs dis-

tricts at Beaufort, Charleston and Georgetown. Capital, Columbia.

PRINCIPAL INDUSTRIES.—Agriculture, mining, fishing, quarrying, lumbering, turpentine and tar making, and phosphate digging.

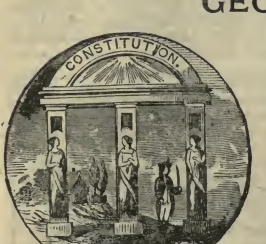
PROPERTY EXEMPT from execution: Homestead to value of $1,000 and product thereof, personal property, such as household furniture, tools, implements, stock, etc., to value of $500, and wearing apparel. No exemption from claims for purchase money, but only articles purchased can be taken, unless other property exceeds exemptions above given. Assignments can be made, but no preferences given, and debtor is not discharged, except from arrest. Suits for land barred after 20 years; after six years on notes not secured by mortgage, for contracts, damage and fraud; after three years for penalties; after two years for libel, assault, imprisonment, etc.; and after ten years on all other actions. Wife's property of all kinds exempt from husband's debts. Arrests may be made of non-residents or those contemplating removal from state or concealment both in actions for debt and for damage, or recovery of property wrongfully detained.

LICENSE CHARGES.—Peddlers, $10 a year to the county. Drummers tax, Charlestown $10 per month; Beaufort $5 and Bennettsville $1 per week; Peeples and Walhalla $1 per day.

LIENS are given for labor, materials, advances on crops, improvements on land and work on vessels.

STATE LANDS include vacant, forfeited and Land Commissioners' lands, and aggregate about 1,900,000 acres. The lands are all for sale, and the method of procedure and information concerning them may be obtained of the secretary of state at Columbia. They are found in almost, if not every, county in the state, and partake of every variety of soil and characteristic known to the state. Many of them are extremely desirable, and the valuation is comparatively low. Vacant lands are those which do not appear on the tax duplicates as belonging to anyone, and may either never have been granted by the state or have been granted and abandoned. These constitute about 1,000,000 acres. Purchasers locate their land by actual survey; make a written application to purchase to the secretary of state, describing same and enclosing one-quarter of the amount they offer; also paying all cost of survey, etc. If the bid is accepted a deed issues, and the balance of the purchase money with a fee of $3 is payable. If the bid is rejected, the one-quarter paid is returned. These lands are also rented in the same manner. Forfeited lands are those acquired and held for taxes. They aggregate 856,000 acres, some of which is very valuable, and cannot be sold for less than the tax, penalties, etc., due on them. These average about $3 per acre. Bids for them are considered and accepted or rejected, the same as in the case of vacant land, except that no location or survey is necessary. A deed conveys absolute title. Failure to complete payment forfeits amount paid. The Land Commissioners' lands amount to some 57,000 acres. They are sold for one-quarter cash, balance in three equal annual installments, with 7% interest. Blanks supplied by the secretary of state.

GEORGIA.



One of the thirteen original states. Named for King George II. of England. Called the "Empire State of the South." Originally a part of South Carolina and claimed by Spain. Charter granted to trustees for the colony June 9, 1732. Savannah founded by Gen. James Edward Oglethorpe, 1733. Spanish war, 1839-42. Colonial charter surrendered 1752, and Georgia became a royal province. General assembly established 1755. State constitution adopted 1777, another 1789, and a third 1798. Active in the Revolution, suffering badly from devastation by English. Severe wars with Creeks and Cherokees settled by treaties 1790 and 1791. Creeks ceded their lands to the United States 1802. Georgia also ceded all lands west of present state line, held under English charter, to United States. Cherokees removed to Indian Territory 1838, and their lands acquired by the government. State seceded January 19, 1861. Constitution C. S. ratified March, 1861. Many hard fought battles during civil war, including Atlanta, etc. New constitution adopted 1868, and another 1877. Re-entered Union 1870. Number counties, 137; miles of railroad, 3,116; state elections, first Wednesday in October; number senators, 44; representatives, 175; sessions biennial, in even-numbered years, meeting first Wednesday in November, hold forty days; terms of senators and representatives, two years each. Number electoral votes, 12; number congressmen, 10. Idiots, insane, criminals and non-taxpayers excluded from voting. Number colleges, 7; State University at Athens, organized 1801; public schools excellent; school age, 6-18. No state license law governing commercial travelers; but Atlanta, Athens, Augusta and Savannah exact a tax. Legal interest, 7%; by contract, 8%; usury forfeits excess of interest.

POPULATION, 1880, 1,542,180; male, 762,981; female, 779,199; native, 1,531,616; white, 816,906; Indians, 124; estimated increase, 15%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Greatest length N. and S., 321 miles; greatest width, 255 miles; area, 58,980 square miles, or 37,747,200 acres, exclusive of water area. Surface diversified. At the north are the Blue Ridge, Etowah, and other mountains. The center is elevated table land, gradually descending to low, swampy country near the coast and along the Florida border. In the southeast is the Okefinokee swamp, 150 miles in circumference. Coast irregular and indented; shore line about 500 miles; three sea-ports. Principal rivers, the Savannah and Altamaha, entering the Atlantic, and the Ogeechee, Ocmulgee, Oconee, Satilla, Allapaha, Chattahoochee and Flint, are all navigable. Mountain streams are rapid with picturesque cataracts and immense basins. The chief falls are the Tallulah, in Habersham county, Toccoa, in the Tugalo, 180 feet high; Towaliga, in Monroe county, and the Amicolah, which descend 400 feet in a quarter mile. Scenery everywhere picturesque; often grand. Plenty of good water. Soil very fine in central region; rocky at north, but superior in the valleys; sandy and rich at the south. Corn, wheat, oats, cotton, rice, sweet potatoes, tobacco, sugar and melons, chief agricultural staples. Fruit, both temperate and semi-tropical, thrives. Stock flourishes. Wool-growing important. Gold is extensively mined. Coal, iron, marble, exist. Cleared land averages $8, and woodland $5.50 per acre.

Attractions very inviting to homeseekers and capital. One-fourth area heavily timbered with yellow pine of great value for lumber, turpentine, etc.; natural grass abundant and nutritious.

CLIMATE.—At the north mild and extremely healthy; hotter in the lowlands. Range of temperature, 30 deg. to 105 deg.; average, winter, 49 deg.; summer, 82 deg. Rainfall averages 55 inches. Lowlands malarial at certain seasons.

CHIEF CITIES.—Savannah, pop. 30,000; Brunswick, pop. 6,000, and St. Mary's, pop. 1,500, ports of entry. Columbus contains the largest cotton mill in the South; pop. 15,000. Atlanta, capital; pop. 60,000.

PRINCIPAL INDUSTRIES.—Three-fourths population engaged in agriculture. Remainder in various pursuits. Manu-

facturing important. Raw materials becoming more abundant and cheap.

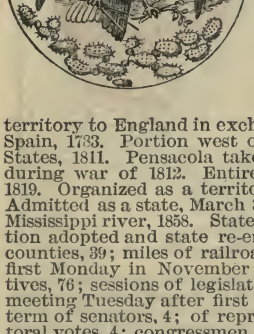
PROPERTY EXEMPT from execution: Arms, horses and equipment of militia, wearing apparel, tools of trade, $30 worth of provisions, one mule or cow worth $50, and ten swine. Each head of family, or guardian or trustee of minors, is entitled to a homestead to the value of $1,000, in either personal or real property. Assignments may be made and give preference. If all property is surrendered a discharge is granted. Suits involving title to land barred or on bond after twenty years; after seven years when written evidence of title exists; after six years on notes or written contracts; after four years on accounts for damage for injury to person or property, and after one year for injury to reputation. Wife's property entirely exempt from husband's debts. Imprisonment for debt not permitted, but arrest may be made on affidavit of intention to secrete property. Wages cannot be garnisheed.

LICENSE CHARGES.—Peddlers, per year, $50 to the county. Drummers license, Savannah, $100 per year; Hartwell and Jessup, $5 per day.

LIENS are given mechanics, but must be filed in 3 months after work is complete, and suit begun within a year after debt is due. Liens are also given to machinists for labor and supplies, to employes and officers of boats and all classes of laborers, millwrights, stone-cutters, etc.

STATE LANDS.—Georgia has no lands to dispose of except what is known as "Head Rights," granted only to residents.

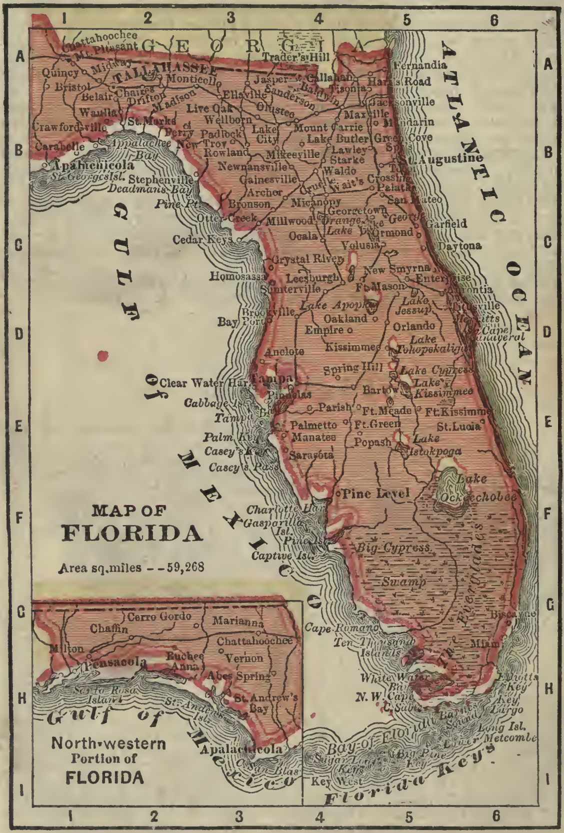
FLORIDA.



Named for its flowers or for "Flowery Easter," having been occupied on Easter Sunday. Called the "Peninsula State." Visited 1513, by Ponce de Leon in search of a supposed fount of Eternal Life. Granted by Charles V, of Spain, 1526, to Pamfilo de Narvaez. Indians resisted colonists till 1565, when first settlement was made by Spanish at St. Augustine. French Protestant refugees disputed territory with Spanish, 1560 to 1570 England laid claim to northern part, 1584, and captured St. Augustine, 1586. Wars with Carolina and Georgia frequent, 1700 to 1800. Spain ceded entire territory to England in exchange for Cuba, 1763. Ceded back to Spain, 1783. Portion west of Perdido river occupied by United States, 1811. Pensacola taken from England by Gen. Jackson during war of 1812. Entire province ceded to United States, 1819. Organized as a territory, 1822. Seminole war, 1835 to 1842. Admitted as a state, March 3, 1845. Seminoles removed west of Mississippi river, 1858. State seceded Jan. 10, 1861. New constitution adopted and state re-entered Union July 4, 1868. Number counties, 39; miles of railroad, 1,324; all elections, Tuesday after first Monday in November; number senators, 32; representatives, 76; sessions of legislature biennial, in odd-numbered years, meeting Tuesday after first Monday in January; holds 60 days; term of senators, 4; of representatives, 2 years. Number electoral votes, 4; congressmen, 2. Idiots, insane, criminals, betters on elections and duelists excluded from voting. Schools, fair; school age, 4-21.—Legal interest 8%; by contract, any rate.

POPULATION, 1885, 330,406; male, 173,922; female, 164,484; native, 289,584; white, 191,185; Indians, 180; slaves, 1860, 61,745. Estimated increase, 1887, 30%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Four-fifths of Florida is in the peninsula, which is about 350 miles N. and S. and 105 miles E. and W. Remainder is the narrow strip along the Gulf, 342 miles E. and W. and 30 to 50 miles



N. and S. Area, 59,268 sq. miles, 37,931.520 acres; 21st state in size. State surrounded by sea except on north. Coast line over 1,200 miles. Good harbors rare, mostly on Gulf. South and west at the head of the peninsula are the Keys and Tortugas, Coral islands. At the north surface is flat, rises gradually to center, 250 feet being the greatest elevation, and sinks southward again into

the Everglades. The northern section is a limestone formation, affording a fair soil. In the middle section are found tracts of great richness, interspersed with sand ridges. At the south, the soil when dry or reclaimed, is inexhaustible. Extending south as far as Charlotte Harbor through the center of peninsula is the Backbone ridge, 175 feet high and 50 miles wide. Shores very low, frequently not two feet above tide water. Coral growth at south continues. The surface is dotted with lakes, many small and several of large area. Drainage of these and the Everglades is progressing on a mammoth scale, and the reclaimed lands will eventually become very valuable. The rivers are sluggish. The navigable ones are the St. Johns, Appalachicola, Perdido, Charlotte and Suwanee. Many lesser ones exist. Canals connecting the larger lakes and the gulf and Atlantic are projected. The excellence of soil and climate, the cheapness of land, etc., are attracting a large northern immigration. Opportunities for homes or enterprise are excellent. The scenery, excepts in its perpetual summer, is uninteresting. The staple products are corn (most valuable crop), sugar, molasses, rice, cotton, oats, tobacco, vegetables of all kinds, peaches, oranges, and all tropical and semi-tropical fruits, cocoanuts, lumber, fish, oysters, etc. Poultry and stock raising are successful. Cleared land averages $12, wood land, $3, swamp, $1, and school land $1.25 per acre. Much forest remains. Timber chiefly pine, of moderate size, free from undergrowth. Game abounds.

CLIMATE superb. No snow. Frosts rare at north, unknown at south. Thermometer ranges 30 deg. to 100 deg., rarely above 90. Winter averages 59 deg. Summer, 81 deg. Breezes blow across from gulf to Atlantic and vice versa, temper the heat and keep air dry and clear. Average rainfall, 55 inches, chiefly in summer. Great resort for invalids. Some malaria at the south, but not serious.

CHIEF CITIES.—Key West, good harbor and naval station; pop., 12,000. Jacksonville; pop., 30,000. St. Augustine, oldest town in United States. Tallahassee, pop., 4,500, capital. Pensacola, pop., 12,000.

PRINCIPAL INDUSTRIES.—Almost the entire laboring population is engaged in agriculture and fruit growing. Fishing for fish and oysters and lumbering largely followed.

PROPERTY EXEMPT from execution: Homestead of 160 acres, with improvements in country, or a residence and half acre in city, and in both cases $1,000 worth of personal property. An additional $1,000 is exempt from debts made before May 10, 1865. Assignments may be made with or without preference, but does not discharge the debtor. Suits on real estate barred after 7 years, after 20 years on judgments or sealed writings, after 5 years on other writings, after 3 years on liability created by statute, except for fraud. After 2 years on accounts, or for libel, slander, or assault. Wife's property exempt from all debts of husband. No arrest allowed, except for fraud.

LICENSE CHARGES.—Drummers, $25 per year; peddlers on foot, $10, with horse and cart, $20; with boat, 20 tons burden or less, $20; over 20 tons, $30.

GOVERNMENT LANDS.—There are government lands in almost every county in Florida subject to pre-emption, homestead and cash entry. They partake of all the characteristics of the state, and range from sandy or swampy to excellent in quality, and include timber lands and a few small prairies. Near the towns they have been picked over, but in the interior good tracts may be found. THE LAND OFFICE for the state is at Gainesville.

STATE LANDS.—Florida owns several million acres of land of varying quality, which are offered at nominal prices. They are located throughout the state. Under this head may be mentioned also the school lands, comprising a very large area.

RAILROAD LANDS.—Several grants of land have been made in aid of railroads, and these are offered at $1.25 per acre up.

ALABAMA.

Name, Indian; means, "We rest here." Visited by De Soto, 1541. Mobile founded by French, 1702. Ceded to England by France, 1763. All south of 31 deg. ceded to Spain by England 1783. The remainder became a part of United States by success of the Revolution. Territory originally part of Georgia, and included Mississippi. Separated from Georgia 1778, under name of Territory of Mississippi. Spanish portion acquired by conquest in war with England 1812, the English being expelled from Mobile, which they had seized. Creek war instigated by English, 1813, who assisted in massacre of Ft. Mims. Battles of Talladega, Emuckfaw and Horseshoe Bend broke power of Creeks. Mississippi separated, 1817, and Territory of Alabama formed. Admitted to Union Dec. 14, 1819. Seceded Jan. 11, 1861. Montgomery made capital of Confederacy Feb. 4, 1861. Same subsequently removed to Richmond, Va. New constitution adopted Feb., 1868, and the state re-entered Union July 14. Present constitution adopted 1875. Number counties, 66; miles of railroad, 2,191. State elections biennial, first Monday in Aug.; number senators, 33; representatives, 100; sessions of Legislature biennial, in even-numbered years, meeting Tuesday after second Monday in Nov., and holding 50 days; term of senators, 4 years; of representatives, 2 years. Number of electoral votes, 10; congressmen, 8. Indians, idiots, convicts of crime excluded from voting. Number colleges, 4; school age, 7-21; schools good. Legal interest, 8%; usury forfeits entire interest.

POPULATION, 1880, 1,262,505; male, 622,629; female, 639,876; native, 1,252,771; white, 662,185; colored, 600,103; Indians, 213; slaves, 1860, 435,080; estimated increase, 1885, 20%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 332 miles; width averages 155 miles, area 51,540 sq. miles, 32,985,600 acres. Surface at N. E. rugged, extending into Allegheny mountains, gradually descends, forming rolling prairies at center of state and flat low stretches at the south. Sea coast 68 miles. Mobile bay best harbor on the gulf. Principal rivers, Tennessee, Chattahoochee, Coosa, Tombigbee and Alabama; the latter two uniting from the Mobile; 1,600 miles of navigable waterways; smaller streams abundant. The mountainous section, 80x165 miles square, has fair soil, and is enormously rich in coal, iron, lime and sandstone, timber and various minerals. The growth here, as yet but begun, is marvelous. Middle section soil fertile and varied. Coast region sandy, but by proper cultivation prolific. Vegetable farming near Mobile very successful. Cotton, mules, iron, coal, sugar, rice, tobacco, hay, oats, corn, staple products. Fruits are a good crop. Much forest remains. Cleared land averages $7, and woodland $4 per acre. State ranks fourth in cotton, fifth in mules and molasses, sixth in iron ore and sugar, seventh in rice. Opportunities for homes and investment superior.

CLIMATE.—Temperature mild; cold at north; warm at south; average, winter, 47 deg.; summer, 81 deg.; July hottest month; range of thermometer, 20 to 95 deg., sometimes for a day reaching 102 deg. Rainfall, 50 inches. Snow or ice very rare. Trees bloom in Feb. Health as good as the average, at least.

CHIEF CITIES.--Montgomery (capital), pop. 30,000; Huntsville, pop. 4,977; Selma, pop. 7,529; Mobile, pop. 29,132; Birmingham, 35,000.

LEADING INDUSTRIES.—Agriculture and kindred pursuits, mining, iron making, lumbering, etc. Number industries, 2,070.

PROPERTY EXEMPT from execution: personal property to value of $1,000; homestead not exceeding 80 acres, or house

and lot in town to value of $2,000. Assignments cannot give preference, and do not release debtor. Suits for land and on judgment barred after 20; on sealed contracts and against officers after 10; for trespass, etc., after 6; on contract after 5; on account after 3, and on actions founded on wrongs after 1 year. Wife's estate exempt; she cannot do business. If widow has no sepa-

rate estate she takes one-third land of which husband died seized in fee, or half if he left no children. No arrest for debt.

LICENSE CHARGES.—Peddlers in wagon, $50; on horse, $20; on foot, $10, in each county, except when products of the state are sold. Drummers' tax, $10 to state, $5 to county and 30 cents fee; Mobile, $3 per day, $7.25 per week (rarely enforced).

LIENS.—Advances for crops if so stated in note and recorded in 60 days in probate judge's office are liens on crop. Landlords have liens on crop for rent. Liens are also given for labor and material. To enforce these suit must be brought by laborers in 1, contractors in 6, and all other persons in 4 months.

GOVERNMENT LANDS, subject to cash, homestead and pre-emption entry, exist to a large extent in Alabama. They comprise every variety of mineral, agricultural and grazing lands, and are scattered through almost every county, with every variety of soil. The LAND OFFICES are at Huntsville for land in the northern portion, and at Montgomery for lands in the southern part of the state.

STATE LANDS, with the exception of swamp and overflowed lands, in dispute, and some limited tracts of school land, are disposed of.

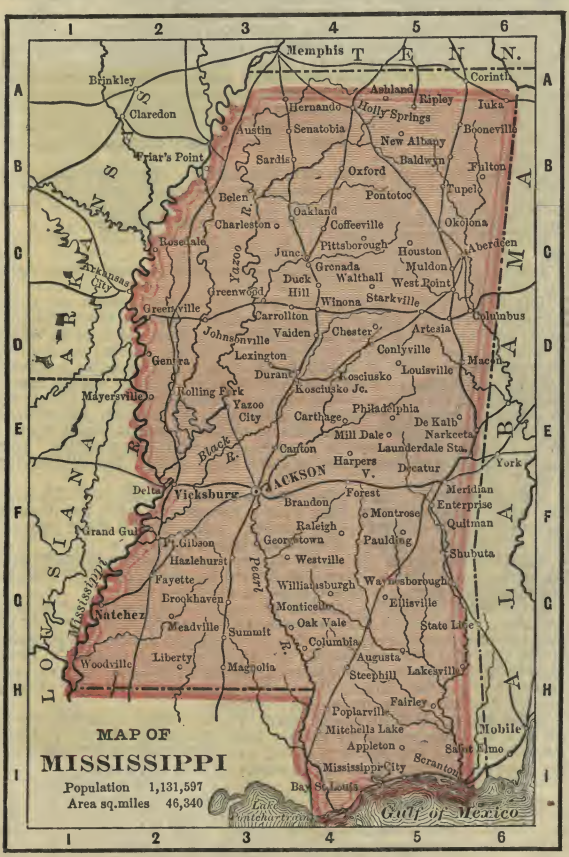
RAILROAD LANDS to the extent of many thousand acres are offered low on good terms.

MISSISSIPPI.

Indian name meaning Father of Waters. Called "Bayou State." Visited by De Soto, 1542; by La Salle, 1682. Settled, Biloxi, 1699, by M. de Iberville. Formed a part of the territory of Louisiana, and belonged to France. Yazoo settlements made 1703; others followed. All settlers killed by Indians, 1728. Chickasaws subdued, 1733. Northern portion acquired by England, 1763. Gulf section transferred to Spain a short time after. Region claimed by Georgia at time of Revolution, and what is now Ala. and Miss. was organized as Territory of Mississippi after peace was secured. Georgia ceded to U.S., 1802, all possessions south of Tennessee line. Gulf Coast acquired by conquest, 1811. Separated from Ala. and state constitution adopted, 1817. Admitted as a state, Dec. 10, 1817. Seventh state admitted. Capital alternately at Washington, Columbia and Natchez till fixed at Jackson, 1822. State active in war of 1814 and with Mexico. Seceded 1861. Corinth, Shiloh, the most notable battles of the rebellion in the state. Constitution amended, 1865; new constitution adopted, 1869, and amended, 1877. State re-entered Union, 1870. Number counties, 74; number miles of railroad, 1,844. State officers elected quadrennially, and legislature every two years; all elections, Tuesday after first Monday in Nov.; sessions of legislature biennial, in even-numbered years, meeting Tuesday after first Monday in Jan.; number senators, 37; representatives, 120; term of senators, 4 years; of representatives, 2 years; number electoral votes, 9; congressmen, 7; voters, 238,532; colored, 130,278; foreign white, 5,674. Idiots, insane and criminals excluded from voting. Number colleges, 3; school age, 5-21; school system, fair. Legal interest, 6%; by contract, 10%; usury forfeits excess of interest. Miles railroad, 1844, 26.

POPULATION, 1880, 1,131,597; male, 567,177; female, 564,420; native, 1,122,388; foreign, 9,209; white, 479,398; colored, 650,291; Chinese, 51; Indians, 1,857; slaves, 1860, 436,631. Estimated increase, 1885, 9%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Greatest length N. and S. 334 miles; average width, 143 miles; area, 46,340 sq. miles, 29,657,600 acres. Coast line, including islands,



312 miles. Harbors, Biloxi, Mississippi City, Pascagoula and Shieldsburg. Surface undulating with a gradual slope from elevation of 700 feet at N.E., W. and S. to the Mississippi and Gulf. Some hills reach 200 feet above surrounding country. From Tenn. line S. to Vicksburg, Mississippi bottoms wide, flat, with more or less swamp and covered with cypress and oak. Soil an inexhaust-

ible alluvium. Central and southern portions 100 to 250 feet above the sea, hilly, with stretches of prairie; soil light but productive, at south sandy with pine growth. Islands, Cat, Ship, and smaller ones 10 miles from coast, all sandy. Rivers Mississippi, Yazoo, Big Black, Bayou, Pierre, Pearle, Pascagoula, Cold Water, Tennessee, Tombigbee, with one or two exceptions, all navigable by large boats. Smaller streams innumerable. All bottoms extremely fertile. Cotton most prolific in bottoms. Staple crops, cotton, rice, sugar, molasses, tobacco, corn, sweet potatoes, grapes for wine. Fruits and vegetables are splendid crops, but are neglected. Forest area large; pine, oak, chestnut, walnut and magnolia grow on uplands and bluffs, long-leafed pine on islands and in sand. Lumbering important industry; mules raised with great success. State ranks second in cotton, fifth in rice. Oyster and other fisheries valuable. Cleared land averages $7.50 per acre; woodland, $3. No state offers easier means of success to settlers. No minerals are found.

CLIMATE mild, snow and ice unknown. Summers long and warm; July and August hottest months. Temperature averages, summer, 80 deg.; winter 50 deg. Rainfall, 46 in. at north, 58 in. at south. Highlands very healthy. Malaria in bottoms.

CHIEF CITIES.—Jackson, (capital), pop., 5,204; Natchez, pop., 7,058; Vicksburg, pop., 11,814.

LEADING INDUSTRIES.—Agriculture, lumbering, fishing and canning.

PROPERTY EXEMPT from execution: team or yoke cattle, 2 cows and calves, 5 hogs or sheep, 150 bu. corn, 200 lbs. meat, 300 bundles fodder, 10 bu. wheat or rice, vehicles to value of $100, sewing machine, household furniture to value of $100, growing crops, tools of trade, books, etc., of profession, arms of militia, homestead of 160 acres, or to value of $2,000. Assignments administered by courts. Suits for land barred after 10: on notes, bills and written contracts, trespass, etc., after 6; on judgments after 7; for verbal contracts after 3, and for assault, slander, etc., after 1 year. Wife's estate, income and earnings exempt. She can contract and sue and be sued separately. No arrest for debt.

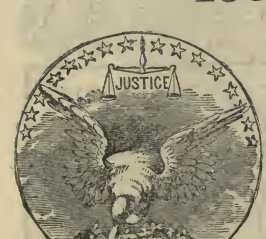
LICENSE CHARGES.—Peddlers on foot, $5; with 1 horse, $10; with horse and cart, $20; with 2 horses and cart, $25 in each county. Peddlers of tin and pottery made in the state pay no license. Drummers pay at Natchez $2.50 per day.

LIENS are given on crops for rents of land, advances and labor; on building for labor and material. Suit must be brought in 6 months. Judgments are liens on all property.

GOVERNMENT LANDS are found in smaller or larger areas in a majority of the counties of the state, but the bulk of them are in the pine district and on the Gulf coast, and partake of the character of the section in which they are found. They offer inviting opportunities to homesteaders, pre-emptors, or cash buyers for a cheap home. The soil is generally good. The LAND OFFICE for the entire state is at Jackson.

STATE LANDS to the extent of over 1,000,000 acres are held for sale by the auditor of public accounts at Jackson, and are purchasable at low figures. They are chiefly lands forfeited for tax, and are dotted all over the state. Titles are good.

LOUISIANA.



Named for Louis XIV. of France. Called the "Pelican State" and the "Creole State." Visited by La Salle 1691. First settled by French on lower Mississippi and Gulf. Originally included all territory west of the Mississippi river to the Rocky mountains and north to British America, with a large area on the gulf east of the Mississippi. Proprietary charter issued, 1717, to Mississippi Company and John Law, and government formed. New Orleans founded by the French, 1718. Proprietary government collapsed, 1732. First sugar cane cultivated in United States near New Orleans, 1751. First sugar mill, 1758. Province ceded to Spain, 1762. First shipment of cotton abroad, 1784. Ceded back to France, 1800, and purchased by United States, 1803, for $15,000,000. What is now Louisiana organized as Territory of Orleans. Remainder of the district still retaining name of Louisiana. All east of the Mississippi claimed by Spain. Occupied by United States, 1811. Name of the territory north of present state changed to Territory of Missouri, 1812, and Louisiana admitted as a state under present name April 8, 1812; capital at New Orleans. In the war with England immediately following, the state made a glorious record, and at the battle of New Orleans, Jan. 8, 1815, humiliated the British and ended the war. Capital removed to Baton Rouge, 1847. Increased rapidly in wealth and population till 1860. Seceded Jan. 26, 1861. Some fighting on the river between boats and forts. New Orleans captured, May 1, 1862. New constitution ratified, 1868, and in June state re-entered Union and capital moved to New Orleans. State constitution amended, 1874, and present one adopted, 1879. Capital moved back to Baton Rouge, 1881. Number of parishes or counties, 58; miles railroad, 2,001. Legislature and state officers elected quadrennially; members congress, biennially; state elections, Tuesday after third Monday in April; number senators, 36; representatives, 93; sessions biennial, in even-numbered years, meeting second Monday in May, holds 60 days; terms of senators and representatives, 4 years each, Number electoral votes, 8; congressmen, 6; voters, 216,787; colored, 107,977; native white, 81,777; foreign white, 27,033. Idiots; insane and criminals excluded from voting. Legal interest, 5%; by contract, 8%; usury forfeits entire interest. Educational facilities, average.

POPULATION, 1880, 939, 946; male, 468,754; female, 471,192; native, 885,800; foreign, 54,146; white, 454,954; colored, 483,655; Chinese, 489; Indians, 848; slaves, 1860, 331,736; estimated increase, 25%

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 294 miles; breadth, 248 miles; area, 45,420 sq. miles, 29,068,800 acres. Surface at the south low and flat, with inexhaustible soil. In the northwest are ranges of hills attaining an altitude of 200 feet. Similar elevations are found on the east bank of the Mississippi. The soil of the hills is good and is more largely in cultivation than the lowlands. Coast line, 1,276 miles; very irregular navigable rivers, 2,700 miles. Mississippi flows in or on the borders of the state. Other navigable streams, Red, Ouachita, Amite, Atchafalaya and Pearl rivers. Chief lakes, Ponchartrain, Verret, Borgue, Grand, Washa, Saline, White, Maurepas, Black, Catahoula and Bistineau. Bays numerous on coast but harbors indifferent. Many small islands in Gulf. Staple

products, sweet potatoes, sugar, molasses, rice, corn, cotton, grasses, oats, etc. All fruits of the semi-tropical climate thrive. State ranks first in sugar and molasses and third in rice. Forests almost inexhaustible. Timber superior in kind and quality; lumbering important industry. Salt produced on a large scale. Iron recently discovered. Cleared land averages $12.50, woodland $3@$4 per acre. Reclamation of marshes very profitable and begin

ning to be done on large scale. Moss-gathering profitable and invites more attention. Inducements offered immigrants of the first order.

CLIMATE.—Temperature ranges from 44 to 100 deg.; average summer, 81 deg.; winter, 55 deg. Rainfall, 57 inches, chiefly in spring and summer. Summers long and occasionally hot. Health,

average. Actual death rate lower than in many northern sections. Occasional yellow fever in the cities.

CHIEF CITIES.—New Orleans, port of entry and largest cotton market in the world, pop., 246,090; Baton Rouge (capital), pop., 7,197; Shreveport, pop., 8,009; Morgan City, port of entry. State institution for insane at Jackson; for deaf mutes and blind, Baton Rouge.

INDUSTRIES.—Three-fifths of laboring population engaged in agriculture. Average income of rural population among highest in Union. Number industries, 1,600.

PROPERTY EXEMPT from execution: Apparel, necessary furniture, arms, tools, musical instruments, team, 2 cows, 25 hogs, 1,000 lbs. bacon; corn and fodder for current year; homestead, all not to exceed $2,000. No exemption if wife has $2,000. Assignment releases only on consent of two thirds creditors. Suits for land barred after 30, on judgment and stated account after 10, on notes after 5 and on open account after 3 years. Wife's property exempt and she hold mortgage on husband's estate for all receipts by him for her account. She must contribute to household expense and can do business. Arrest may be made for debt, but under conditions that render same of no effect.

LICENSE CHARGES.—Peddlers in boat, $100; with 2 horses, $20; with more than 2 horses, $25; with 1 horse, $10; on foot, $5.

LIENS held on crop for salary of overseer, for rent, labor and advances; on buildings for labor and material. Judgments are liens on real estate.

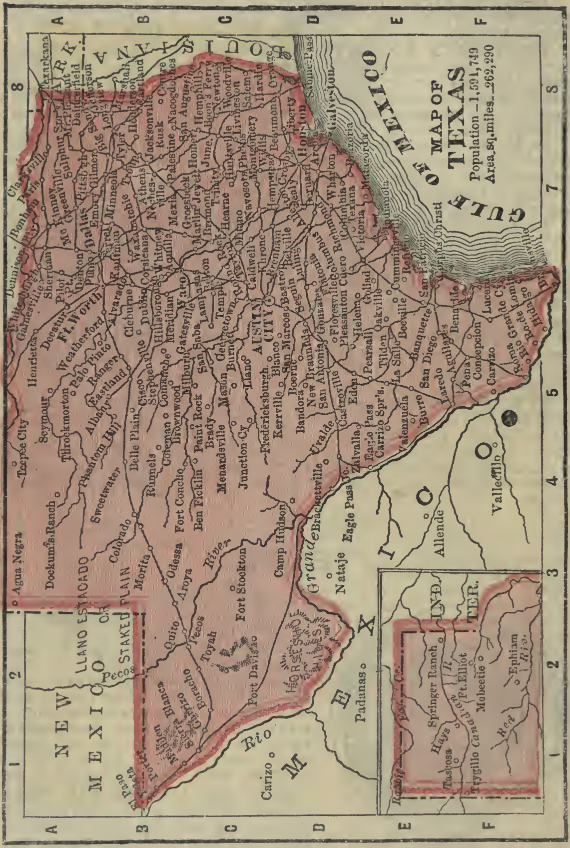
GOVERNMENT LANDS to the extent of nearly 6,000,000 acres remain subject to cash, homestead and timber culture entry. They are scattered over the entire state, but lie mostly in the prairies, good uplands, pine hills or pine flats. The LAND OFFICES are at Natchitoches for the northwestern 13 counties and New Orleans for rest of the state.

STATE LANDS aggregate 9,000,000 acres, mostly low and unfit to live on, but enormously fertile; they are both prairie and magnificently timbered and lie near hill sections of government land. Settlers can enter 160 acres state lands at 12½ cents per acre, and by combining with government homestead and timber culture 480 acres can be had for $50.40. State Land Office at Baton Rouge.

TEXAS.

Origin of name unknown; called "Lone Star State." Settled first by French, under LaSalle, 1685; was a part of Old Mexico, and formed the states of Texas and Coahuila. Trouble with Louisana over border 1803; settled 1819; Saline river fixed as boundary between states. Mexican government granted extensive area to Moses Austin 1820, and confirmed them to his son, S. F. Austin, who formed colonies of Americans. Coahuila and Texas consolidated, and revolted against discriminating laws 1835. Defeated Mexicans at battles of Concepcion, Goliad and Gonzales, Oct. same year. Sam. Houston made commander of army. Mexicans expelled after battle of San Antonio de Bexar, Dec 10, 1835. Independence declared Dec. 20. Houston inaugurated as President Oct., 1836. Independence of the Republic recognized by United States, March, 1837; by European powers, 1839 and '40. Continued wars with Mexico; embarrassed finances. Proposition for union

with United States, 1845, and admitted as a state Dec. 29. State paid $10,000,000 by United States for all lands outside present limits, 1850. Seceded Feb., 1861. Houston, who refused to secede, deposed. Military operations small. Last battle of the war near Rio Grande, May 13, 1865. Re-entered Union 1870. Present constitution adopted 1875. Number counties, 228; miles of railroad, 6,198. All elections Tuesday after first Monday in Nov.; number



senators, 31; representatives, 106; sessions of legislature biennial, in odd-numbered years, meeting second Tuesday in Jan.; holds 60 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 13; congressmen, 11; voters, 380,376. United States army, lunatics, idiots, paupers and convicts excluded from voting. Number colleges, 10; school age, 8–14.

School endowment enormous; includes 23,470,377 acres yet unsold. Legal interest 8%, by contract 12%; usury forfeits entire interest.

POPULATION, 1880, 1,591,749; male, 837,840; female, 753,909; native, 1,477,133; foreign, 114,616; white, 1,197,237; colored, 393,384; Chinese, 136; Indians, 992. Estimated increase 30%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 830 miles: extreme width, 750 miles; area, 167,865,600 acres; largest of the states and territories; includes many small islands. Coast line, 412 miles; irregular, and bordered by lagoons; Galveston bay largest, has 13 feet of water, 35 miles inland. Rio Grande (navigable 440 miles), Pecos, Red, Nueces, Angelina, Trinity (all navigable streams), Canadian, Brazos, Colorado, Gaudaloupe and San Antonio are the chief rivers. Some small lakes; one remarkable one, with a bed of salt at S. E. corner state. Surface varied; mountains between the Pecos and Rio Grande, reach 6,000 feet high, with broad valleys between. West and N. W. a high table land; from latter the surface slopes gradually to the Gulf and lower Rio Grande, being low and level at south and east. Lands extremely fertile, except in the N. W., where water is scarce. Lands on Rio Grande and at south require irrigation for good results, although crops will grow to some extent without. Entire state covered with rich grasses, affording pasture the year round. Water plenty at a shallow depth; quality good. All cereals, root crops, vegetables, fruit and stocks flourish. Cotton best crop. Other staples: sugar, molasses, sweet potatoes, corn, wheat, grapes and fruits. Dairying extensive. Cattle, sheep, goat and hog raising on mammoth scale. Cotton picking, July to Dec.; corn planting, middle of Feb.; grain harvest, May; corn harvest, July. Ranks first in cattle and cotton; second in sugar, sheep, mules and horses. Coal area, 6,000 sq. miles; quality good. Iron ore and salt deposits extensive. Other minerals found, but extent unknown. Improved land averages $8, and unimproved $3@$4 per acre. No state offers more or better chances for homes and wealth. Uncultivated and timber land seven-eighths of area; timber area, one-fourth; quality moderate.

CLIMATE varies; temperate at north, semi-tropical at south. Health everywhere most excellent. Thermometer ranges from 35 to 98 deg., but seldom rises to the latter temperature. At Austin averages, winter, 56 deg.; summer, 80 deg. Rainfall averages at Austin 35 inches; increases on coast and to the south; decreases to 13 inches in N. W.

CHIEF CITIES.—Brownsville, El Paso, Indianola and Galveston (ports of entry); Houston (important railroad center), pop. 20,000; Galveston (metropolis, best harbor, chief shipping point), pop. 35,000; Austin (capital), pop. 18,000; San Antonio (oldest town), pop. 27,000; Dallas, pop. 15,000.

INDUSTRIES number 3,000. Leading ones, grazing and agriculture, lumbering, mining, dairying, milling, etc.

PROPERTY EXEMPT from execution: Homestead, 200 acres or lot in town, value not to exceed $5,000 at time of designation as homestead; subsequent improvements also exempt; furniture, tools, books, and limited quantity of stock to heads of families; horse, saddle, bridal, apparel and tools to single men. Assignments may prefer those who discharge debtor. Actions for real estate barred after 10 years when held without title; after 5 years when held under deed; after 3 years when held under chain of title; after 10 years on judgments; after 4 years on written contract or account between merchants; after 2 years on other accounts, and after 1 year for personal damages. Wife's property exempt. She cannot do business separately. No imprisonment for debt.

LICENSE CHARGES.—Peddlers on foot, $10 per year in each county; with one horse, $25; with two horses, $40; drummers' tax, $200 per year, remitted if employer pays occupation tax in the state.

LIENS hold on buildings for labor and material; on crops for rent or supplies advanced; on property of tenants for rent in cities; on baggage for board; and livery stables have lien on teams for feed. Judgments are liens for ten years on real estate.

STATE LANDS.—There is no government land in Texas. The state lands include **School Lands** 23,470,377 acres, located in every county; **University Lands,** 2,000,000 acres in Pecos, Crockett and Tom Green counties, and some remnants scattered through Cook, Grayson, Fannin and McLennan counties belonging to the same interest, both governed by the same rules of sale, etc., and endowments of clemosynary institutions. Sales of educational lands suitable for agriculture, are limited to one section for each purchaser, at $2 per acre, without competition, the purchaser making affidavit that he will settle on same within six months, and paying in advance one-thirtieth of the purchase money, and annually thereafter five per cent interest on the balance, and, at his option, he may withhold the payment of such balance until the end of 30 years, or at the end of 3 years, pay in full and obtain a patent. Grazing lands are sold in quantities, not to exceed three sections to any one purchaser, the purchaser paying to the state in advance one-thirtieth of the purchase money, as above, and annually thereafter for 30 years 5% interest on the balance of the debt, but he cannot pay in full and receive a patent until the expiration of seven years from date of purchase. The minimum price for grazing lands per acre is $2, but competition between applicants for the same tract is allowed. A paper designating the land and the amount per acre bid is by each competitor filed with the surveyor of the county in which the land lies, and 11 days before final award is to be made, the surveyor makes a public outcry of the bids. Should any higher bid or bids be then offered, he transmits them along with those previously filed in his office to the Land Board in Austin. That Board awards the land so competed for to the highest bidder on the first Tuesday in each month. Lands containing water are not now offered, either for sale or lease. Leases for the term of five years are made by the Land Board, at the minimum price of six cents per acre per annum.

TENNESSEE.

Takes its name from Indian name for the Tennessee River. Called "Big Bend State." First settled, 1754. Fort London, near Knoxville, established 1756. Territory called "Wataug Association," 1769. Became a part of North Carolina, 1777. Organized as the State of Franklin, 1785, but again became part of North Carolina, 1788. Ceded to United States by North Carolina, 1789. District now comprising Tennessee and Kentucky formed into the "Territory of the United States south of the Ohio," 1790. Tennessee territory organized 1794. Admitted as state June 1, 1796. State Constitution framed, 1796. Amended, 1834, 1853, 1865 and 1870. Capital, Knoxville, 1794, removed to Nashville, 1812. Returned to Knoxville, 1817. Removed to Murfreesboro, 1819, and returned to Nashville, present seat, 1826. Creek war, 1813, ended by breaking their power at battle of Tallapoosa March 27, 1814. First railroad part of N. & C., 1853, Nashville to Bridgeport. Seceded, June 8, 1861. Battles of Forts Henry and Donelson, Feb. 6 and 16, 1862. Fort Pillow and Island No. 10, March, 1862. Chicamauga, Sept. 19, 1863.

Lookout Mountain, Nov. 24, 1863. Missionary Ridge, Nov. 25. Re-entered Union, 1866. Number counties, 96. State, congressional and presidential elections, Tuesday after first Monday in November; number senators, 33; representatives, 99; sessions biennial, in odd-numbered years, meeting first Monday in January; holds 75 days; terms of senators and representatives, 2 years each. Number electoral votes, 12; number Congressmen, 10; number voters, 571,244; native white, 240,939; foreign white, 250,055; colored, 80,250. Non-payers of poll-tax excluded from voting. Legal interest 6%; by contract, any rate; usury forfeits excess of interest and $100 fine. Schools fair. Miles railroad, 1,323;

POPULATION, 1880, 1,542,359; male, 769,277; female, 773,082; native, 1,525,657; foreign, 16,702; white, 1,138,831; colored, 403,151; Chinese, 25; Indians, 352. Slaves, 1860, 275,519.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W. 430 miles; width, 110 miles. Area, 41,750 sq. miles, 26,720,000 acres. Mountainous at E. where Apalachians separate state from North Carolina. Succeeding this to the westward is a table land which terminates in the "great central basin" of Middle Tennessee. West of this is a plateau region to the Mississippi river. Chief rivers, Mississippi, Tennessee, Cumberland, Clinch, Holston, Forked Deer, Big Hatchie and Wolf. First three navigable, others afford enormous water power. Small streams very numerous. Soil fair, except in central basin, where it is very productive. State abounds in coal, iron, fine marbles and building stones, copper and other minerals. Possesses one of the finest areas of virgin forest in the Union. Principal timbers, walnut, oak, poplar, ash, hickory, etc. Staple products, mules, hogs, peanuts, corn, wheat, cotton, vegetables of all kinds, potatoes, tobacco, hemp, flax, broomcorn, iron, copper, coal, marbles, etc. Ranks second in peanuts and third in mules. Resources but little developed and plenty of room and opportunities for home and fortunes exist. 5,000 sq. miles of coal field, with 3 to 7 workable veins. Cleared land averages $12.50, forest $5 per acre. Grape growing pays.

CLIMATE one of healthiest in world. Mild and pleasant, and owing to varying elevation very diverse. Snow light and lays briefly. Ice rarely more than a mere film in thickness. Average temperature, winter 38 deg.; summer, 75 deg. Extremes seldom occur. Rainfall, 45 to 47 inches. Air bracing.

CHIEF CITIES.—Nashville, capital; pop., 43,350. Memphis, pop., 33,592; Chattanooga, pop., 12,892; Jackson, pop., 8,377; Knoxville, pop., 9,693.

INDUSTRIES chiefly agricultural, mining, lumbering and iron making.

PROPERTY EXEMPT from execution: Two beds and clothing and an additional bed for each 3 children, each bed not to exceed $25 in value; 1 cow; 1 calf, or if family contains 6 persons, 2 cows and 2 calves; 12 knives and forks, 12 plates, 6 dishes, set of table and set of tea spoons, bread tray, 2 pitchers, waiter, coffee-pot, tea-pot, canister, cream jug, 12 cups and saucers, dining-table, two table cloths, 12 chairs, bureau to $40; safe or press, wash basin, bowl and pitcher, kettle, 2 tubs, churn, looking-glass, axe, spinning-wheel, loom and gear; pair cotton cards, pair wool cards; cooking-stove and utensils to $25; cradle, Bible and school books; 2 horses or mules, wagon, to $75; harness, man's saddle, woman's saddle, 2 bridles; 25 bbls. corn, 20 bu. wheat, 500 bundles oats, 500 bundles fodder; hay, to $20; 1,250 lbs pork alive or slaughtered, or 900 lbs. bacon; poultry to $25; home-made carpet; 6 cords wood, or 100 bu. coal; reasonable provisions designated; carpet to $25; 200 bu. cotton seed, 2 plows, 2 hoes, grubbing hoe, cutting-knife; harvest cradle, plow gears, pitch-fork, rake, wedge, 5 sheep, 10 stock hogs; mechanics tools, gun; to head of family or female, sewing machine; 50 lbs. picked cotton, 25 lbs. wool, leather for shoes, $50 in material to mechanics. In addition to the above $250 in personal property is exempt and home-

stead to value of $1,000. Exemptions extend to estate of householder in favor of widow or children. Assignments cannot prefer. Suits barred after 7 years for real estate or for claims against deceased person; after 10 years on official or administrative bond or judgments; after 6 years for malfeasance, on notes, accounts, contract, etc.; after 3 years for injury to property; after 6 months

for slander; after 1 year for injury to person. Wife's property exempt. No imprisonment for debt.

LICENSE CHARGES, per year: Peddlers on foot, $20; with horse or vehicle, $50, and $50 additional for each vehicle and $10 for each additional horse. Licenses issued quarterly. Drummers pay $50 per year to state, and counties may charge $5. Memphis charges $10 per week, $25 per month.

LIENS hold on structures and lot for labor or material. Claimants against contractor must notify owner. Lien precedes mortgage if latter is notified. Liens also hold on crop for rent or supplies; on property for house rent; on baggage and teams for board or food. Judgments are liens on real estate for 10 years.

KENTUCKY.

Name Indian. Signifies dark and bloody ground, because the state was the hunting and battle ground of the tribes. Called "Corn Cracker State." Explored 1767 by John Finley and others from North Carolina. Boone settled 1769, and penetrated to the Ohio 1771. Indians resisted settlement vigorously. Pacified by treaty with Cherokees, March, 1775. Organized as "Colony of Transylvania," but claimed by Virginia, and became Kentucky county, Va., 1776. Louisville founded, 1780. Became, with Tennessee, 1790, "Territory of U. S. South of the Ohio," and in same year Territory of Kentucky organized. Admitted as a State June 1, 1792. State constitution adopted same year. Replaced by new one, 1800. State furnished 7,000 troops in war of 1812, and 13,700 in Mexican war. Won great credit in latter. New constitution, 1850, and amended 1877. Neutral at beginning of civil war. State the scene of continuous cavalry raids during the war, and some sharp battles at Perryville, Richmond, etc. Put under martial law, 1864. Civil government restored, 1865. Union soldiers furnished, 75,760. Number counties, 118. State elections biennial, first Monday in August, in odd-numbered years. Number senators, 38; representatives, 100; sessions of legislature biennial, in even-numbered years, meeting last day of December, holds 60 days. Term of senators, 4 years; of representatives, 2 years. Number electoral votes, 13; number congressmen, 11; number voters, 376,221. Bribers, robbers and forgers excluded from voting. Number colleges, 15; public school system framed, 1838; good schools, school age 6-20 years. Legal interest 6%; by contract, 10%; usury forfeits excess over 10 per cent. Miles of railroad, 1,887.

POPULATION, 1880, 1,648,690; male, 832,590; female, 816,100; native, 1,589,173; foreign, 59,517; white, 1,377,179; colored, 271,451; Chinese, 10; Indians, 50; slaves, 1860, 225,483.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W. 350; width, 179 miles; area, 40,000 sq. miles, 25,600,000 acres. River frontage, 832 miles; navigable water ways, 4,120 miles. Surface mainly mountainous at southeast and east, and slopes gradually westward. It is through ut hilly, except in the river bottoms, which are narrow. Average elevation about 850 feet. Average elevation eastern half 1,100 feet. Soil fair, except in the famous "Bluegrass region," extending for 40 or 50 miles around Lexington, and one of the most beautiful sections on the globe. River bottoms also extremely fertile. Principal rivers, Mississippi, Ohio, Kentucky, Green, Salt, Tennessee, Cumberland, Licking, Big Sandy and Big Barren. Smaller streams fed by perennial springs abound. Natural wonder Mammoth Cave, greatest in the world. Kentucky ranks high as an agricultural and stock state. Staple crops, corn, wheat, tobacco, oats, barley, hemp, rye and vegetables; fruits do fairly. Famous for thoroughbred horses and cattle. Mules and hogs largely

raised. At the east in the mountains are immense forests of virgin oak, poplar, ash, chestnut, elm, walnut, cucumber and other valuable timber trees. Coal, marbles, minerals, oil, stone, etc., also abound. Iron deposits of immense magnitude are known to exist. The lands are cheap, and this section is destined to become one of the richest in the Union. The state is making an effort, and possesses splendid opportunities for immigration and capital. Cleared land averages $20 and woodland $5 per acre. The average of the former is raised materially by the high prices, often $100 or more per acre in the bluegrass section. Mountain lands rich in timber and minerals and not without agricultural value, rate $2 to $5 per acre. The state ranks first in tobacco, and fourth in malt and distilled liquors.

CLIMATE variable, favorable to health and agriculture; healthfulness not surpassed; thermometer ranges from 5 deg. below zero to 98 deg. above; rarely greater extremes are known; temperature averages, summer, 75 deg., winter, 38 deg; rainfall 50 inches. Snows fall but disappear in a few days. Sleighing only for a day or so. Winters moderately long. Malaria very rare, except on the Ohio and Mississippi rivers.

CHIEF CITIES.—Louisville, pop. 156,300; Frankfort (capital), pop. 6,958; Covington, 29,720; Lexington, former capital, founded 1776, pop. 16,656; Newport connected with Covington by bridge, pop. 20,433. Louisville and Paducah ports of entry.

CHIEF INDUSTRIES.—Agriculture, stock-raising, lumbering, iron-making, mining and distilling.

PROPERTY EXEMPT from execution: Homestead, $1,000; horse or yoke of oxen, 2 cows, 5 sheep, apparel, household furniture, $100; sewing machine; professional library and instruments, $500; wages, $50; mechanics tools, $100. Assignment cannot prefer. Suits barred after 30 years for real estate; after 15 years on contract in writing, official bond or judgment; after 5 years for trespass on bills, notes, stated accounts or for fraud; after 2 years from succeeding January on merchants accounts; after 1 year for personal damage. Wife's property exempt. She cannot do business. Arrest for debt may be made on affidavit of concealment of property, fraud, etc., but plaintiff must give bonds. Bail allowed or release secured by insolvent debtor's oath.

LICENSE CHARGES, per year: Peddlers, $100 for state, or 65 cents for each 100 voters in any county. License issued by county clerk. Drummers tax, Newport, $1 per month.

LIENS hold for labor and material if statement is filed in 60 days and suit brought in 1 year. Sub-contractors and laborers must notify owner. Judgments are not liens on real estate.

OHIO.

Indian name meaning "Beautiful River," called "Buckeye State." Explored by La Salle, 1679. Region claimed by France and held by force. Title of England settled by treaty of Paris, 1763. Became with all the northwest territory a part of Virginia, although claimed under old English charter by New York, Connecticut and Massachusetts. First settled, 1762, by Moravians on the Muskingum. These expelled by British, 1781. Expedition of Bouquet, 1764. Dunmore war, 1774. Cornstalk's warriors defeated on the Sciota. Cincinnati founded, 1789. Clarke overcame Miamis, 1782. Marrietta founded, 1788. Miami Indians conquered

by Gen. Wayne, 1794. Virginia ceded region to the United States under condition that the northwest territory should be divided into not less than five states, and Ohio became part of Territory of the Northwest. Ohio Territory organized May 7, 1800. Admitted as a state, April 30, 1802. Capital fixed at Chillicothe, 1800, removed to Zanesville, 1810, returned to Chillicothe, 1812, and removed to Columbus, 1816, where it remains. Constitution re-

vised, 1851. Number Union soldiers furnished, 313,180. Number counties, 88. State and congressional elections, second Tuesday in October; number senators, 33; representatives, 105; sessions biennial, but "adjourned sessions" practically amount to annual meetings; assembles first Monday in January; terms of senators and representatives, 2 years each. Number electoral votes, 23;

number congressmen, 21; number voters, 826,577; insane and idiots excluded from voting. Number colleges, 35; school age, 6–21; school system, first-class. Legal interest rate, 6%; by contract, 8%; usury forfeits excess. Miles of railroad, 7,276.

POPULATION, 1880, 3,198,062; male, 1,613,931; female, 1,584,126; native, 2,803,119; foreign, 394,943; white, 3,117,920; colored, 79,900; Chinese, 109; Indians, 130.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 225 miles; breadth, 200 miles. Area, 40,760 sq. miles, 25,686,400 acres. Includes Kelley's and Bass' islands in Lake Erie. Lake frontage, 230 miles. Ohio river frontage, 432 miles. A great ridge or divide traverses the state from Trumbull Co. in the N. E. to Mercer Co. at the W., having an elevation averaging about 1,200 feet. The surface of the state slopes north from the divide to Lake Erie (elevation 565 feet) and south to the Ohio river (elevation 440 feet at Cincinnati). Main streams, Ohio, Muskingum, Sciota, Big and Little Miami, Mahoning, Hocking, Maumee, Cuyahoga, Huron, Rocky, Chagrin, Sandusky, Portage, etc. Entire state well watered. Valleys extremely productive. Uplands fertile as a rule. Scenery beautiful, but with no prominent features. Ohio ranks first in agricultural implements and wool; second in dairy products, petroleum, iron and steel; third in wheat, sheep, coal, malt and distilled liquors; fourth in printing and publishing, salt, miles railway and soap; fifth in milch cows, hogs, horses, hay, tobacco and iron ore. Coal, building stones, iron ore and salt are found in vast quantities. Staple crops, wheat, corn, oats, potatoes, tobacco, buckwheat, etc., vegetables, apples and the hardier fruits. Cleared land averages $45, woodland $40 per acre. Little forest valuable for lumber remains except in small reserves.

CLIMATE as healthful as any in the United States. Warmest on Ohio river. Temperature for state averages, winter, 35 deg.; summer, 77 deg.; range of temperature, 16 deg. below zero to 101 deg. above. Changes sometimes sudden. Snowfall considerable. Average rainfall, including snow, 42 inches, decreases to 37 inches at north and increases to 47 inches at south.

CHIEF CITIES.—Cincinnati, "Queen City of the West;" pop., 255,139. Cleveland, pop., 160,146. Columbus, capital, pop., 51,647. Chillicothe, Zanesville, Toledo, Sandusky, Cleveland and Cincinnati ports of entry.

LEADING INDUSTRIES.—Agriculture, dairying, mining, quarrying, iron making, pork packing, manufacturing

PROPERTY EXEMPT from execution: To single women, apparel $100, sewing machine, knitting machine, books $25. To head of family, necessary apparel, beds and bedding for family, 2 stoves, 60 days' fuel, tools of trade to $100; domestic animals and 60 days' feed, or furniture to $65; books, pictures, provisions to $50, sewing and knitting machines, carning for three months, homestead to value of $1,000, or if none possessed, $500 in personal property in addition to the above. Assignments cannot prefer and do not release. Suits for real estate barred after 21 years, after 2 years for forcible entry and detaining, after 15 years on bond and written contract, after 6 years on verbal contract and statute liability, except penalty; after 4 years for trespass or injury to person or property, after 1 year for assault or slander. Wife's property exempt. Her separate note good. Arrest for debt may be made on affidavit of fraud, concealment or removal.

LICENSE CHARGES.—Peddlers on foot, $12; on horseback, $20; with horse and cart, $20; 2 horses and cart, $28; in boat or by rail, $60. License issued by county auditors.

LIENS hold for two years on structures or vessels for labor and materials if statement is filed in county recorder's office in 4 months; judgments are liens on real estate for 5 years.

PUBLIC LANDS.—A few isolated tracts of government and school lands may remain. The former is in charge of the General Land Office, Washington, D. C.

INDIANA.

Called the "Hoosier State." Settled at Fort St. Vincents, now Vincennes, 1702, by French-Canadian voyagers. Region belonged to France. Acquired by England, 1763, and became a part of Virginia by capture by the expedition of Clarke, 1776. Ceded to U. S. by Virginia, 1783, and formed part of the Northwest Territory. Organized, 1787. Indian wars, 1788 to 1791, ending in the enforced submission of the tribes. Indians ceded large bodies of land to government by treaty of Greenville, 1795. Ohio cut out of Northwest Territory, 1800, and the territory of Indiana organized, which included all section west of Ohio to the Mississippi river, and north of the Ohio river to British possessions. Michigan cut out as separate territory, 1805, and Illinois, 1809, leaving Indiana with its present boundaries. War with Shawnees under Tecumseh, 1811. Battle of Tippecanoe ended struggle in defeat of Indians. Admitted as a state Dec. 11, 1816. Sixth state admitted. State constitution adopted June 19, 1816. New constitution 1851; amended 1881. soldiers furnished in Mexican war, 5,000. Union soldiers, 196,363. Number counties, 92. All elections Tuesday after first Monday in November; number senators, 50; representatives, 100; sessions of legislature biennial, in odd-numbered years, meet Thursday after first Monday in January, holds 60 days; term of senators, 4 years; of representatives, 2 years; number electoral votes, 15; number congressmen, 13; number voters, 498,437. Fraudulent voters and bribers excluded from voting. Number colleges, 15. State University at Bloomington; medical school at Indianapolis; university at Notre Dame; flourishing common-school system; school age, 6-21. Legal interest rate, 6%; by contract, 8%; usury forfeits excess of interest. Miles of railroad, 5,534.

POPULATION, 1880, 1,978,301; male, 1,010,561; female, 967,940; native, 1,834,123; foreign, 144,178; white, 1,938,798; colored, 39,228; Chinese, 29; Indians, 246. Estimated increase 8 per cent.

TOPOGRAPHY, AREA, SOIL, PRODUCTS ETC.—Extreme length N. and S. 275 miles; width averages 150 miles; area, 35,910 sq. miles, 22,982,400 acres. Surface usually level or rolling, sometimes hilly. No mountains. Skirting the river bottoms are ranges of hills and bluffs, notably so on the upper Ohio. Hills 200 to 400 feet above the surrounding country. General slope of the state south to west. Frontage on Lake Michigan 43 miles; lake shore low and sandy, except at Michigan City. Chief rivers, Ohio, Wabash, White, Kankakee, Maumee; small streams everywhere; river bottoms wide and unsurpassed in fertility; highlands when level, rich, black or sandy soil; hills sand or limestone, with thin but productive soil, except at southeast, where hill lands are poor. All crops and fruits of the temperate zone do well both in yield and quality. State highly favored for agriculture and manufacturing. Ranks second in wheat; fourth in corn, hogs and agricultural implements; fifth in coal. Cattle, hogs, sheep, horses, etc., are most successfully raised. Corn, wheat, oats, staple crops. Timber still abundant at south, but in scattered tracts. Coal fields in southwestern portions of state over 7,000 sq. miles, on much of which are 3 workable veins. Kinds of coal, block, cannel and ordinary bituminous, cokes well, superior for gas. Building stones varied and of unsurpassed quality, including the famous Bedford stone. Supply unlimited. Land is

cheap, cleared averaging $18, and woodland $14 per acre. In rich section to southwest cleared land $15, woodland $10@12. Chances for making homes, comfort and advantages considered, not excelled elsewhere. Iron ore is found.

CLIMATE changeable in winter, but seldom severe; winds from north and west; summers moderately long, and sometimes hot; temperature averages, winter, 34 deg., summer, 78 deg.

Trees blossom in March. Rainfall 40 inches. Health excellent. Malarial disappearing from bottoms before proper drainage.

CHIEF CITIES.—Indianapolis (capital), contains deaf and dumb, blind and insane asylums, pop. 75,056; Terre Haute, 26,042; Evansville, 59,230; Fort Wayne, 26,880. Michigan City, lake port.

INDUSTRIES. Agriculture, mining and manufacturing.

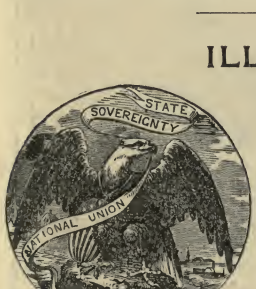
PROPERTY EXEMPT from execution: Real or personal to value of $600. Property sold must bring two-thirds appraised value, unless the law is waived by contract. Assignments do not release. Suits barred after 20 years for injuries to person or character, on written contracts, for real estate; after 10 years on notes, bills, etc.; after 6 years on accounts, for rents, injury to property and relief from fraud; after 15 years on actions not especially limited. Wife's property exempt. She can sue, be sued, make will, etc. She takes instead of dowry one-half in fee simple in lands. Arrest for debt legal on affidavit of removal with property subject to execution with intent to defraud.

LICENSE CHARGES.—Non-resident peddlers selling goods made out of the state pay to county treasurer $5 on $1,000 capital; $7.50 on more than $1,000 and less than $2,000; $10 on capital up to $5,000, and $20 on capital greater than $5,000.

LIENS hold on structures, railroads or boats for labor or material, on crops for rent when rented on shares, on land for benefits from drains, levees, etc. Liens must be filed in county recorder's office in 60 days after completion of work. Judgments are liens on real estate for 10 years.

PUBLIC LANDS.—A few isolated tracts of **Government Land** may exist. Transactions relating to them are in the hands of the General Land Office at Washington, D. C. **State Lands,** including, swamp, university and college fund lands are held for sale to a considerable extent. They are in small tracts scattered over the state, and are controlled by the Auditor of State.

ILLINOIS.



Name derived from Illini tribe of Indians, meaning Superior Men, and also said to be French. Called "Prairie State" and "Sucker State." Discovered June 20, 1673, by Marquette and Joliet. Settled first at Kaskaskia (later seat of government of N.W. territory) by Jesuits, 1682. Formed part of Louisiana territory and belonged to France. Transferred to England by Treaty of Paris, 1765. Seized and British expelled by Clarke's Virginia expedition, July 4, 1778, and became a part of Virginia, being called Illinois county. Became part of the "Northwest Territory" organized 1787. Ohio cut out of territory, 1800, and what is now Indiana, Wisconsin, Illinois and Minnesota (east of Miss. river) was organized as Indiana territory. Illinois territory formed, 1809. Kaskaskia, capital. Fort Dearborn (Chicago) massacre, 1812, by Pottawatomies. Admitted as state, 1818. Capital removed to Vandalia, 1818. State constitution adopted same year. Black Hawk war, 1831. Capital moved to Springfield, 1836. Mormon troubles, 1839. Mormons expelled, 1844. New constitution, 1848. Soldiers in Mexican war, 5,000. Union soldiers, 259,092. Number counties, 102. All elections, Tuesday after first Monday in Nov.; number senators, 51; representatives, 153; sessions biennial, in odd-numbered years, meeting first Monday in Jan.; term of senators, 4 years; representatives, 2 years. Number electoral votes, 22; congressmen, 20; number voters, 796,847; convicts excluded from voting. School system excellent; number colleges, 28; school age, 6–21. Legal interest, 6%; by contract, 8%; usury forfeits entire interest. Miles of railroad, 18,905.

POPULATION, 1880, 3,077,871; male, 1,586,523; female, 1,491,-

348; native, 2,494,295; foreign, 583,576; white, 3,031,151; colored, 46,368; Chinese, 209; Indians, 140. Estimated increase 9%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length N. and S., 386 miles; extreme width, 218 miles. Average elevation, 482 feet; elevation at Cairo, 340 feet; highest point, 1,140 feet in northwest portion. Area, 56,000 sq. miles, 35,840,000 acres; miles of navigable water-ways, 4,100. Frontage

on Lake Michigan 110 miles. Principal streams, Mississippi, Ohio, Wabash, Kankakee, Calumet and Illinois. Surface extremely level and much of it prairie. Slopes to east and south. Soil superior. Among first agricultural states of Union. Staple crops, corn, wheat, oats, rye, barley, broomcorn, vegetables, hay, potatoes, etc. Fruits and grapes, except Catawba, do well at

south. Yield of all crops cultivated, large. Coal area, two-thirds state. First coal mined in America at Ottawa; quality moderately fair. Considerable forest of hardwoods at south on hills and in bottoms. Superior quality limestone on Fox and Desplaines rivers; lead, most important mineral; Galena in center of richest diggings in N. W. Rich salt wells in Saline and Gallatin counties, 75 gallons brine making 50 lbs. salt. State ranks first in corn, wheat, oats, meat packing, lumber traffic, malt and distilled liquors and miles railway; second in rye, coal, agricultural implements, soap and hogs; fourth in hay, potatoes, iron and steel, mules, milch cows and other cattle. Cleared land averages $28, and woodland or raw prairie, $18 per acre. Land cheaper at south, which offers excellent inducements to immigration.

CLIMATE healthful as a rule; subject to sudden and violent changes at north. Temperature ranges from 30 deg. below zero to 101 deg. above. Average temperature at Springfield, 30 deg. winter; 78 deg. summer. At Chicago, 25 deg. winter; 72 deg. summer. At Cairo, 38 deg. winter; 80 deg. summer. Frosts come last of September. Vegetation begins in April. Rainfall, 36 inches.

CHIEF CITIES.—Chicago, pop. 700,000. Peoria, pop., 29,259. Quincy, pop 27,268. Springfield (capital), pop. 19,743.

INDUSTRIES—Agriculture, mining, stock-raising and manufacturing of all kinds.

PROPERTY EXEMPT from execution: homestead to value of $1,000. Exemption ends after death till youngest child is 21 years old; apparel, books and pictures: $100 in other property, and when debtor is head of family, $300 in other property, not money; wages of laborer exempt to $25. Assignments cannot prefer and do not discharge. Suits for land and on judgement barred after 20 years, after 7 years when title is held by record, after 10 years on notes, bills and written contracts, or mortgages, after 2 years for personal injury, after 1 year for slander, and after 5 years on all other actions. Wife's property exempt. She may do business, make will, and change her estate. Arrest for debt only in cases of fraud or refusal to surrender property.

LICENSE CHARGES.—Peddlers and drummers not taxed.

LIENS hold on building and lot, and railroad, for labor, material and services. Sub-contractors have lien for amount due contractor. Notice must be given by contractor in 6 months, by sub-contractor in 40 days. Judgments are liens on land for 7 years.

PUBLIC LANDS.—A few isolated tracts of government may exist, and is controlled by the General Land Office at Washington, D. C. The state has no lands. The counties hold unimportant areas of forfeited school land.

MICHIGAN.

Name, Indian, meaning "Land of Lakes." Called "Wolverine State." First settlement by Father Marquette, 1668, at Sault Ste. Marie. Fort Michimackinac (Mackinaw) built by French, 1671. Detroit founded, 1701. Territory belonged to France. Passed to possession of England, 1763, followed by Pontiac conspiracy and massacre at Mackinaw. Became part of Virginia at close of Revolution. Ceded by Virginia to U. S., and formed part of Northwest Territory. Became part of Indiana territory, 1800. Michigan territory formed 1805, did not include upper peninsula, but extended west to Missouri river. Devastated by Indians and

English in war 1812-14, until run off by Gen. Harrison. Wisconsin included in the territory of Michigan, 1818, and separated from it 1836. State constitution adopted 1836. Admitted as state Jan. 26, 1837. Thirteenth state to enter Union. Received upper peninsula as compensation for disputed territory same year. Capital fixed at Lansing, 1847. New constitution adopted 1850, still in force. Union soldiers furnished, 87,364. Number coun-

ties, 79. Miles railroad, 5,233. All elections Tuesday after first Monday in November. Number senators, 32; representatives, 100; sessions of legislature biennial, in odd-numbered years, meeting first Wednesday in January; terms of senators and representatives, 2 years each; number electoral votes, 13; number congressmen, 11. Number voters, 467,687. Duelists excluded

from voting. Number colleges, 9; efficient public schools; school age, 5-20 years. Legal interest, 7%; by contract, 10%; usury forfeits excess of interest.

POPULATION, 1884, 1,856,100; male, 974,424; female, 879,028; native, 1,357,639; foreign, 503,461; white, 1,830,480; colored, 15,123; Indians, 6,900. Estimated increase, 11%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—State formed of two peninsulas and number small islands. Extreme length lower peninsula north and south, 278 miles; breadth, 260 miles. Extreme length upper peninsula east and west, 320 miles; width, 24 to 165 miles; area, 57,430 sq. miles, or 36,755,200 acres. Length shore line on Lakes Michigan, Superior, Huron, St. Clair and Erie, North Channel and Green Bay, 2,000 miles. Lower peninsula consists of plains and table lands, heavily timbered with pine and hardwoods, and small prairies, with elevation of 600 to 750 feet. At south are ranges of hills, and bordering Lake Michigan are sand-hills and bluffs sometimes 300 feet high. The soil is generally good, but patches of sand occur. Saginaw and Thunder bays in Lake Huron and Grand and Little Traverse bays in Lake Michigan form splendid harbors. Fruit raising, especially apples, peaches and grapes, very successful. All cereals make good crops, except corn at north. Staples, wheat, corn, oats, buckwheat, potatoes, barley, etc. Upper peninsula broken, rocky, and almost mountainous, rising at west to 2,000 feet above sea. Western portion mining region; eastern portion favorable to agriculture. Rivers, inlets and small lakes numerous. Water good and well distributed. Chief islands, Isle Royale and Grand Island in Lake Superior, Marquette, Mackinaw and Bois Blanc in Lake Huron, and Beaver, Fox and Manitou in Lake Michigan. Copper in Houghton, Ontonagon and Keweenah counties; valuable iron ores in Marquette and Delta counties; coal in Shiawassee, Eaton, Ingham and Jackson counties. Salt abundant. Timber yet in immense tracts of virgin pine and hardwoods. Grand Haven, Au Sable and Detroit are centers of valuable fishing interests; principal catch is trout and whitefish. State ranks first in copper, lumber and salt; second in iron ore; third in buckwheat; fifth in sheep, hops and potatoes. Inducements to farmers, manufacturers, miners, and all classes of immigrants, first class. People progressive. Cleared land averages $20 per acre; forest, $10.

CLIMATE.—Temperature averages at Detroit, winter, 30 deg.; summer, 70 deg.; at Sault Ste. Marie, winter, 23 deg.; summer, 65 deg. Rainfall at Detroit, 30 inches; at Sault Ste. Marie, 24 inches. Health excellent. Temperature at Marquette averages about 3 deg. lower than at Sault Ste. Marie.

CHIEF CITIES. Detroit, pop. 132,956; Grand Rapids, pop. 41,898; Lansing (capital), pop. 9,774; Bay City, pop. 29,412; East Saginaw, 29,085; Jackson, 19,100; Muskegon, 17,825; Saginaw, 13,760; Detroit, Marquette, Port Huron, Grand Haven ports of entry.

CHIEF INDUSTRIES.—Lumbering, mining, farming, fruit raising, manufacturing, fishing, etc.

PROPERTY EXEMPT from execution: Spinning wheels, looms and apparatus; stoves for use; arms, etc., of militia; apparel; $150 in books; family pictures; 10 sheep and fleeces and manufactures thereof; 2 cows; 5 swine; 6 months provision and fuel for family; $250 in household goods; 6 months feed for stock named above; tools of trade; team, etc., essential to occupation. Exemptions do not hold for purchase money except on tools, etc. There is also exempt $500 in personal property and homestead to value of $1,500. Assignment under insolvent law may discharge debtor. Suits barred after 20 years for land if person was out of the United States when right occurred; otherwise after 15 years; after 10 years when claimed under tax deed, and also on judgments; after 6 years on contracts, accounts, etc.; after 2 years for injury to person or reputation. Wife's property exempt. She may dispose of same separately, do business, etc. Arrest for debt permitted where it involves breach of trust or fraud.

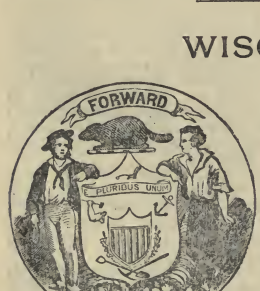
LICENSE CHARGES.—Peddler on foot, $15; with horse, $40; with 2 horses, $75; by rail, $100. Travelers taking order, $50, to treasurer of state.

LIENS hold on structures and lot for labor and material. Notice must be filed in county register's office in 60 days, and suit brought in 60 days more.

GOVERNMENT LANDS remain subject to homestead, pre-emption and cash entry to a considerable extent in Michigan. The land offices are located at Detroit for the counties of Alpena, (10,000 acres government land). Cheboygan (5,000 acres), and Presque Isle (2,200 acres); at Reed City for the surrounding section, in which 50,000 acres of government land remains, chiefly pine plains; at Marquette for the northern peninsula, area government land very large, and at East Saginaw.

STATE LANDS are designated as swamp, but include all classes of land. They are held at $1.25, except in a few northern townships, where the price is $2, and lie in almost every county aggregating over 180,000 acres. These lands are sold in tracts of 80 acres to applicants making affidavit of intention to settle on them on payment of ¼ the price, the balance to be paid in 10 years with 7% interest annually. A homestead of 80 acres or less may be taken free if the homesteader does not already own 40 acres. In all cash purchases road scrip may be used in payment and the quantity of land which may be bought is unlimited by law. The scrip can be bought at a discount from private holders. **School lands.** The state also holds for sale, at $4 per acre, 316,000 acres of school land. Where timbered it must be paid for in cash, otherwise it is sold on time at 7% interest. There is further about 125,000 acres of **college lands** held at $5 to $12.50 per acre, sold on same terms as school land. The educational lands are scattered all over the state. Information relating to them may be had of the Michigan State Land Office at Lansing, where they are controlled.

WISCONSIN.



Indian name of river; means "Wild Rushing River." Called "Badger State." Settled first by French at Green Bay, 1669. Belonged to Virginia. Ceded to United States. Formed part of Northwest territory. Included in Indiana territory, 1800. Became part of Michigan territory, 1805. Wisconsin territory organized 1836, and included Iowa, Minnesota and part of Dakota. Present boundaries fixed, 1838. Madison made capital, 1838. Applied for admission, 1846. Admitted as state, May, 1848. Seventeenth state to join Union. State constitution adopted 1848; still in force, but amended. Number Union soldiers furnished, 91,327. Number counties, 66; miles railroad, 4,259. All elections, Tuesday after first Monday in Nov.; number senators, 33; representatives, 100; sessions biennial, in odd-numbered years, meeting second Wednesday in Jan.; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 11; number congressmen, 9; number voters, 340,482; insane, idiots, convicts, bribers, betters and duelists excluded from voting. Number colleges 7; number public schools, 6,588; school age, 4–20 years; school endowment very liberal. Legal interest, 7%; by contract, 10%; usury forfeits entire interest.

POPULATION, 1885, 1,506,423; male, 809,094; female, 754,339; native, 1,101,072; foreign, 462,353; white, 1,509,618; colored, 53,807; Chinese, 16; Indians, 3,161. Estimated increase, 10%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length N. and S., 298 miles; width, 260 miles; area, 54,450 sq. miles; 34,848,000 acres. Surface presents varied and beautiful scenery, without any grand features. Forms a great plain 580 to

about 1,700 feet above sea level, highest points being at the N.W.; gradual slope to Lake Michigan and the south. Chief rivers, Mississippi, Fox, Wisconsin; these, with innumerable smaller streams, furnish such picturesque scenery as the famous "Dells," etc., and afford a multitude of valuable water powers, many of which are still unutilized. Besides the great lakes Michigan and

Superior, the state contains Green bay, Winnebago, Geneva, Devil's lake, and innumerable other lakes in the central and northern sections of the state, of unsurpassed beauty, making the state a favorite place of summer resort. Mississippi river navigable throughout S. W. boundary; excellent harbors in Lake Superior and Michigan. Port Washington, one of the finest natural harbors in the world. Much of state prairie, but enormous stretches of magnificent pine and hardwood timbers remain untouched. The soil is excellent and adapted to diversified farming, dairying and stock raising. The hardier fruits grow, and berries are a fine crop. Cranberries are largely raised. Wheat is the best crop; flax, buckwheat, hay, corn, oats, staples. Extensive lead mines in Grant, Lafayette and Iowa counties; native copper in the north, in Crawford and Iowa counties. Milwaukee clay famous for making cream-colored brick. Iron ores in Dodge, Sauk, Jackson and Ashland counties. Ranks second in hops, third in barley and potatoes, fourth in rye and buckwheat, fifth in oats and agricultural implements. Improved land averages $18 and unimproved $10 per acre. Much government and railroad land yet untaken. Opportunities for homes and enterprise first-class.

CLIMATE.—Temperature averages, winter, 20 deg., summer, 71 deg.; ranges from 32 deg. below zero to 95 deg. Rainfall 31 inches, including snow. Snows heavy, especially at north; spring late; summers short; falls pleasant. Milwaukee river frozen over an average of 105 days in year. Health superior. Air bracing and life giving.

CHIEF CITIES. Milwaukee, port of entry, great pork packing and beer brewing center, grain and wheat market; pop. 158,509. Madison (capital), pop. 16,000. Eau Claire, pop. 25,000; Fond du Lac, pop. 15,000; Oshkosh, 24,000; La Crosse, 24,000.

LEADING INDUSTRIES.—Lumbering, farming, mining, manufacturing, brewing, pork packing, dairying, etc.

PROPERTY EXEMPT from execution: Family pictures, books, apparel, $200 in household furniture, 2 cows, 10 swine, yoke oxen and horse or 2 horses, 10 sheep and wool of same, 1 years feed for stock named, wagon, etc., to $50, provisions and feed for 1 year, tools, stock in trade or professional books, etc. to $200, printing materials $1,500, life insurance, insurance on exempt property when destroyed, homestead 40 acres in county or ¼ acre in town with improvements. Assignments may prefer, but do not discharge debtor, but a discharge in insolvency may be obtained; suits barred after 20 years on bond or judgment, and after 10 years if cause of action accrued out of the state; after 6 years on contracts and liabilities. Wife's property exempt. She can dispose of same as if single. Arrest for debt may be made in case of fraud, malfeasance or removal.

LICENSE CHARGES per year: Peddlers on foot, $15; with horse, $20; with 2 horses, $40; with more than 2 horses, $50. License issued by Secretary of State.

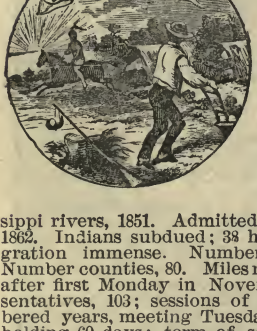
LIENS hold on structures for labor and material, if petition of same be filed with county clerk within 1 year. Sub-contractors must give owner 30 days notice of claim. Judgments are liens on real estate for 10 years.

GOVERNMENT LANDS.—A very large portion of Wisconsin is yet public in domain, and comprises every description of land found in the state. It is subject to homestead, pre-emption and cash, and in some sections to timber culture entry. THE LAND OFFICES are at *Eau Claire* for the region included in townships 25 to 40 north inclusive, and ranges 1 to 11 east inclusive, at *Falls of St. Croix* for lands lying in townships 38, 39 and 40, ranges 12 to 20 west inclusive, and is mostly timbered with pine and hardwood; and at *Menasha*, *Wausau*, *Bayfield* and *La Crosse* for the districts surrounding each.

STATE LANDS include school lands, 120,000 acres, held at $1 to $1.25 per acre; University lands, 1,700 acres, held at $2 to $3 per acre; Agricultural College lands, 13,000 acres, at $1.25 per acre; Normal School (swamp) lands, 470,000 acres, at 50c. to $3 per

acre; drainage land (swamp), 500,000 acres, at 50c. to $3 per acre, and Marathon county lands, 4,000 acres, at 75c. per acre. The educational lands, except Normal school lands, are sold for ¼ cash balance in 10 years at 7% interest in advance annually. All other lands are sold for cash.

MINNESOTA.



Name Indian, signifies "Sky like water." Called "Gopher state." Explored by Fathers Hennepin and LaSalle, 1680, via Mississippi river to Falls St. Anthony. Portion east of the Mississippi river a part of the Territory of the Northwest, covered by the treaty forced from England, 1783. The western portion acquired from France by purchase, 1803. It belonged first to Missouri and then to Iowa. Fort Snelling built, 1819. Tract between the St. Croix and Mississippi ceded by Indians, 1837. Territory organized, 1849. Sioux Indians ceded all land between Big Sioux and Mississippi rivers, 1851. Admitted as state, 1858. War with Dakotas, 1862. Indians subdued; 38 hanged at Mankato. Foreign immigration immense. Number Union soldiers furnished, 25,052. Number counties, 80. Miles railroad, 4,193. All elections Tuesday after first Monday in November; number senators, 47; representatives, 103; sessions of legislature, biennial, in odd-numbered years, meeting Tuesday after first Monday in January; holding 60 days; term of senators, 4 years; representatives, 2 years. Number electoral votes, 7; congressmen, 5; voters, 213,485; idiots, insane and convicts not voting. Number colleges, 5; school age, 5-21; school system, first-class. Legal interest rate, 7%; by contract, 10%; usury forfeits excess over 10%.

POPULATION, 1885. 1,117,700; male, 611,107; female, 506,593; native, 687,120; foreign, 427,513; white, 776,884; colored, 1,564; Indians, 2,300. Estimated increase, 10%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 378 miles; average width, 261 miles. Area, 79,205 sq. miles, 50,691,200 acres. Surface rolling plain 1,000 feet above sea level, except at N. E., where are a series of sand hills called "Heights of Land," 1,600 feet high. It is the state of small lakes, including over 7,000, varying from a few rods to 32 miles across. In one of these, Itasca, the Mississippi rises and flows 800 miles through the state. The other principal rivers are the Minnesota, Red River of the North, and the St. Louis. Small streams and lakes make water plentiful. The scenery is picturesque and beautiful. The soil is splendid, as a rule, and the accessibility to market and general attractions render the state especially favored by agriculturists. The forests of the state are small (2,000,000 acres), but in parts are rich in fine timbers. Two-thirds of the state is unoccupied. Cleared land averages $12.50 per acre and woodland $8. Wheat is the great crop. Corn, oats, barley, hay and dairy products are also staples. State ranks fourth in wheat.

CLIMATE.—Healthful. Air pure and dry, summers warm, averaging 68-70 deg.; winters cold, averaging 9-24 deg. Rainfall 36 inches, chiefly in summer. Snowfall medium. The dryness mitigates the cold in winter.

CHIEF CITIES.—Pembina, port of entry on Red river. St. Paul, capital; pop. 111,397. Minneapolis, pop. 129,200.

CHIEF INDUSTRIES.—Agriculture, dairying, milling, etc.

PROPERTY EXEMPT from execution: Books, pictures

and musical instruments of family, apparel, household furniture to $500, 3 cows, 10 swine, yoke oxen and horse or a team, 20 sheep and wool of same, 1 year's feed for stock named, wagon and farm implements to $300, provisions and fuel for 1 year, tools, books, etc., of trade or profession, stock in trade to $400, homestead 80 acres or 1 lot in town with improvements. No exemption from liens for labor. Assignments may be made voluntarily or on

petition of creditor; do not discharge debts. Suits are barred after 20 years for land and foreclosure, after 10 years on judgments, after 6 years on contract, after 2 for slander, assault, etc. Wife's property exempt. She can contract. No arrest for debt.

LICENSE CHARGES.—Drummers and peddlers untaxed.

LIENS hold on structure, boat, etc., for labor and material for 2 years if statement is filed with county register in 1 year.

Sub-contractors must file in 60 days. Owners may avoid liens by proper notice. Judgments are liens on real estate for ten years.

GOVERMENT LANDS remain unoccupied to the extent of about 13,000,000 acres, and include fertile prairie and timber tracts or iron lands, and to which may be added 1,000,000 acres of the Pembina and Red Lake reservations, all fine land. **The Land Offices** are at Benson for the surrounding district (no government land subject to entry remains); at Worthington (vacant land exhausted), at Crookston for the counties of Kittson, Marshall, Polk, Norman, Clay, Becker and Beltrami and the northern tier of township in Otter Tail, containing about 1,000,000 acres chiefly timbered and brush prairie; at Duluth, for that part of the state north of Pine county and east of Itaska and Aitkin, two tiers of township in the east of both being included, and includes 7,000,000 acres of vacant land one-third unsurveyed, all rich in minerals and timber; at St. Cloud, controlling 3,500,000 acres between ranges 25 and 35 from town 120 to Canadian line, two-thirds unsurveyed; at Fergus Falls, controlling 10,000 acres chiefly in Grant and Wilkin counties; at Tracy, controlling 1,000 acres odds and ends; at Redwood Falls, controlling the lands, its district 30 miles wide and reaching across the state east to west 60 miles north of the Iowa line. At the west are some fine prairies; at Taylors Falls, controlling 200,000 acres vacant land in Chisago, Anoka, Aitkin, Isanti, Kanabec, Mille Lacs, Pine, Ramsay, Sherburne and Washington counties. All government lands in the state are subject to pre emption, homestead and cash entry.

STATE LANDS include **School** lands (16th and 32d section in every township), minimum price, $5 per acre; **Internal Improvement** lands, 240,000 acres, average price, $5.29 per acre; **University and Agricultural College** lands, about 75,000 acres, average price, $6 per acre; **Public Building** lands not yet in the market; **Swamp** lands. No land can be sold for less than the appraisement. They are only sold at public auction in June and October of each year. Terms of sale, 15% of the purchase money and interest at the rate of 5% on the balance from the day of sale to the first day of June, next, in cash. On hardwood lands the the value of the timber is required besides. The balance of purchase money, in full, or installments, is payable at the option of the purchaser, at any time within thirty years, on school, agricultural college and university lands, and twenty years on internal improvement lands, provided that interest at the rate of 5% is paid *in advance*, June first, each year, or within sixty days after.

DAKOTA.

Named for Dakota Indians. First settled at Pembina, 1812, by Lord Selkirk as British territory. First permanent settlements of Missouri river, 1859. Organized as territory March, 1861, and included Wyoming and Montana. First legislature met, 1862, at Yankton, which was made the capital. Immigration became active, 1866. Capital removed, 1883, to Bismarck. Chief settlements in Red and Missouri river valleys. Propositions pending to divide the territory. Railroad building active, and systems mammoth in their scale. Application for admission, made. Number counties, 129. All elections, Tuesday after first Monday in Nov.; number senators, 12; representatives, 24; sessions biennial, in odd-numbered years, meeting second Tuesday in Jan, and holding 60 days; terms of senators and representatives, 2 years each. Legal interest rate, 7%; by contract 12%; usury forfeits excess. School endowments, when the territory shall become a state, magnificent. Miles railroad, 2,759.

POPULATION, 1885, 415,263; male, 236,045; native, 264,620; white, 414,065; Indians, 27,550 (2,330 Sioux).

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—

Average length N. and S., 451 miles; width, 348 miles; area, 149,112 sq. miles; 95,431,680 acres. Indian reservations principally west of Missouri river; 42,000,000 acres; one-seventh good farming land. Surface high, level, plain, 950 to 2,600 feet above the sea; traversed by ranges of lofty hills, which at the S. W. reach an elevation of 7,000 feet in the Black Hills. The Missouri river traverses the territory diagonally from N. W. to S. E., and is

navigable. Other principal rivers, Yellowstone, Little Missouri, White, Big Cheyenne, Niobrara, Dakota, Red River of the North, Vermillion and Big Sioux. Smaller streams are very numerous. Lakes are numerous, especially in the north and east; Devil's lake is semi-salt, 12x40 in extent; other large lakes are Big Stone, Albert, Poinsett, Whitewood, Traverse and Tchauchicaha. The soil is very rich and peculiarly suited to wheat, which is the

staple crop. Corn, oats, grasses and potatoes do well. Fruit not a good crop. Cattle, and especially sheep raising, favored and growing industries. Timber scarce, except along the streams and in some of the hills. Gold and silver extensively mined. Black Hills very rich in precious minerals. Ranks fourth in gold output. Good coal west of the Missouri. Not much developed as yet. Scenery, not striking, except in hills. Deposits of tin said to be of great value exist. Inducements to immigration first-class. Price of land $1.25 to $20 per acre (latter improved).

CLIMATE.—Temperature ranges from 32 deg. below zero to 100 deg. above; averages, winter, 4 to 20 deg.; summer, 65 to 75 deg. Winters at north severe, with heavy snow; moderate at the south. Air clear, dry and free from malaria. Cold not so penetrating as in moister climates. Springs late and summers of medium length. Rainfall 19 in., chiefly in spring and summer.

CHIEF CITIES.—Fargo, northern metropolis; Bismarck (capital); Yankton and Sioux Falls important centers.

INDUSTRIES.—Almost entire laboring population, engaged in agriculture and mining.

PROPERTY EXEMPT from execution: family pictures, $100 in books, apparel, provisions and fuel for one year $1,500 in other personal property, homestead of 160 acres land or 1 acre in town regardless of value. Assignment cannot prefer and does not release debtor. Suits barred after 20 years for land on judgment or sealed instrument, after 6 years in contract or liability, after 2 years for slander or assault. Wife's property exempt. she can sell, contract, etc., as if single. Arrest for debt permitted in cases of fraud, concealment, removal or damage.

LICENSE CHARGES may be fixed by county clerks.

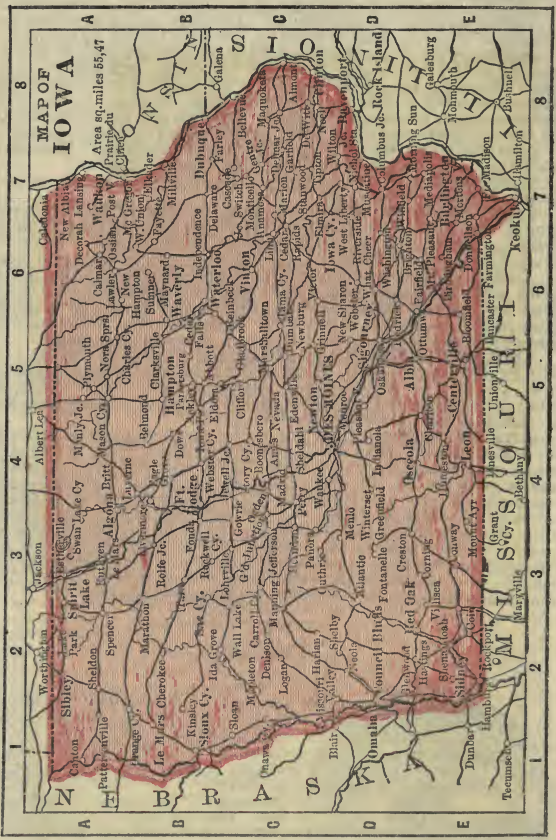
LIENS hold on ground and structure for labor and material if filed in 90 days by contractor, or in 60 days by sub-contractor. Judgments docketed in clerks office of county where land lies are liens on same for ten years.

GOVERNMENT LANDS are found in all parts of Dakota. Near towns they have been picked, but back from settlement choice trade are yet vacant. The LAND OFFICES are located at Bismark for the surrounding district containing 18,000,000 acres vacant land; at Grand Forks; at Devils Lake for district 92x102 miles in area, mostly vacant; at Mitchell (all lands taken except those in Crow Creek reservation now open to entry); at Watertown; Fargo, Yankton, Deadwood, Aberdeen and Huron for the surrounding districts. All government lands in the territory are subject to homestead, pre-emption and cash entry. Much railroad lands for sale. No territorial lands now offered.

IOWA.

Indian name, means "This is the place." Called the "Hawkeye State." Settled first by Dubuque, 1788, a French Canadian, for whom that city is named. First settlers miners of lead. Territory belonged to France. Acquired by United States by "Louisiana Purchase," 1803. Formed part of Louisiana till 1812, when it was included in Missouri territory. Active immigration began 1833. Became part of Michigan 1834, and of Wisconsin 1836. Iowa territory organized July 4, 1838. Burlington made capital. Removed 1839 to Iowa City. Admitted as state 1846. Constitution modified 1857. Union soldiers furnished, 76,242. Num-

ber counties, 99; miles of railroad, 7,510. State elections annual, Tuesday after second Monday in October, excepting years of presidential elections, when all elections occur together. Number senators, 50; representatives, 100; sessions of legislature biennial, in even-numbered years, meeting second Monday in January. Term of senators, 4 years; of representatives, 2 years.



Number electoral votes, 13; congressmen, 11; number voters, 416,658. Idiots, insane and criminals excluded from voting. Number colleges, 19; school age, 5-21. School system admirable endowment liberal. Legal interest rate, 6%; by contract, 10%; usury forfeits 10 per cent. per year on amount. State has adopted prohibition.

POPULATION, 1885, 1,753,980; male, 911,759; female, 842,221;

native, 1,443,576; foreign, 310,404; white, 1,614,600; colored, 9,210; Chinese, 33; Indians, 466.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 298 miles; width, 208 miles; area, 55,470 sq. miles, 35,500,800 acres. Surface almost an unbroken prairie, without mountains and with very few low hills. Some bluffs on streams, but scenery pretty and rather monotonous. Natural meadows are formed everywhere, and water is abundantly supplied by small streams. Many small picturesque lakes at north. Highest point, Spirit Lake, over 1,600 feet above the sea. Slopes southeast, and elevation at mouth of DesMoines river 440 feet. Principal streams, Mississippi, Missouri, Des Moines, Iowa, and Little Sioux. Soil averages superior. Corn, wheat, oats, potatoes, hay, barley, sorghum, rye, staples. Apples unsurpassed in United States; pears, plums, cherries, grapes and berries are excellent crops. Cattle and other stock interests large and thrifty. Dairying especially attractive. Forest area small and scarcely equal to home requirements. Coal area fair. Other minerals unimportant. Manufacturing active. Improved land averages $20; unimproved, including railroad and government domains, $12.50. State ranks first in hogs; second in milch cows, oxen and other cattle, corn hay and oats; third in horses; fifth in barley and miles of railway.

CLIMATE healthy, but subject to extremes. Winter severe, with sharp north and west winds; summers pleasant. Temperature averages, summer, 72 deg.; winter, 23 deg.; ranges from 10 deg. below to 99 deg. above zero. Rainfall, 42 inches. Wheat harvest in August.

CHIEF CITIES. Des Moines, metropolis and capital; pop. 32,459. Pop. of Dubuque, 26,330; of Davenport, 23,830; of Burlington, 23,459; of Council Bluffs, 21,557. Keokuk, Burlington and Dubuque are United States ports of delivery.

LEADING INDUSTRIES.—Agriculture, stock raising and manufacturing.

PROPERTY EXEMPT from exection: apparel and trunks, etc., gun, tools, books, or instruments of trade or profession, horse and vehicle of physician, minister, officer, farmer or teamster, library and pictures. To heads of family in addition, cow, calf, 5 hogs, all pigs under 6 months old, horse, 60-days feed for animals named, flax raised by debtor and manufactured of same, $100 in household furniture, weaving devices, bed for every 2 in family, 6 months fuel and provisions, printing press and plant to $1,200, 90 days' earnings and homstead 40 acres, or half acre in town from debts accruing after its acquisition. Assignments cannot prefer and do not release. Suits barred after 2 years for injury to person or reputation, after 5 years on verbal contract or for fraud, after 10 years on written contract and for real estate, after 20 years on judgment. Wife's property exempt, her control of it is same as if she was single. Arrest for debt permitted only in cases of fraud.

LICENSE CHARGES per year: peddlers (if goods are not made in state) on foot, $10; with less than 4 horses, $25; with more than 4 horses, $75. Peddlers selling watches, $30; clocks, $50.

LIENS hold on structures and land for labor if same is filed clerk District Court in 90 days by contractor, or in 30 days by sub-contractor. Judgments are liens on land for 10 years.

PUBLIC LANDS.—The government lands of Iowa are about, if not entirely taken up. The land office for the entire state is at Des Moines. There are no lands for sale by the state. School lands yet unsold in a majority of the counties are controlled by the Board of Supervisors of each county in which they lie. The largest areas are in the northern and northeastern counties. They are sold at public auction by the county auditor at not less than $6 per acre. Lands are also for sale under the University and Saline grants by the Board of Regents of the Iowa University at Iowa City. A considerable area of railroad land remains unsold.

NEBRASKA.

Name Indian, means "Shallow Water." Included in territory acquired from France in 1803 by "Louisiana Purchase." Nebraska Territory organized May, 1854, included all region north of present state to British possessions, and west to Rocky mountains. Few settlements till 1864. In 1861, 16,000 sq. miles cut off to form Colorado; nearly 250,000 sq. miles to form Dakota, and large strip added from Utah and Washington Territories. Idaho cut off March, 1863, and present boundaries fixed. Refused to become a state 1860. Indian raids, 1864. State constitution ratified June, 1866. Bill to admit July, 1866, unsigned by President Johnson, and another Jan., 1867, vetoed. Bill passed over veto Feb., 1867. Admitted that year. Lincoln chosen as capital. Constitutional convention, 1871. Present constitution adopted, 1875. Union soldiers furnished, 3,157. Number counties, 74. Miles of railroad, 1865, 122; 1885, 2,794. All elections Tuesday after first Monday in Nov.; number senators, 33; representatives, 100; sessions biennial, in odd-numbered years, meeting first Tuesday in Jan., holding 40 days; terms of senators and representatives, 2 years each; number electoral votes, 5; number congressmen, 3; number voters, 129,042. U. S. army, idiots and convicts excluded from voting. Number colleges, 9; school age, 5-21; school system superior; school endowments liberal. Legal interest, 7%; by contract, 10%; usury forfeits interest and cost.

POPULATION, 1885, 740,645; male, 378,540; female, 322 105; native, 354,988; foreign, 97,414; white, 449,764; colored, 2,385; Chinese, 18; Indians, 235.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 424 miles; width, 210 miles; area, 76,185 sq. miles, 48,755,000 acres. Surface a vast plain, undulating gently, and principally prairie with a few low hills. At extreme northwest are spurs of the Rocky mountains, and Black Hill country begins; general slope from W. to E.; Missouri, Platte, Niobrara, Republican and Blue, principal rivers, and are fed by numerous smaller streams. Platte valley stretches across entire length of state, is wide and very fertile; southern portion of state peculiarly favorable to all kinds of crops; western half magnificent series of pastures, and best suited to grazing. Whole eastern two-fifths a great natural garden. Corn the great crop; wheat, oats, hay, rye, buckwheat, barley, flax, hemp, apples, plums, grapes, berries, staples and flourish. Cattle raising of vast importance and magnitude. Good herd laws. No important minerals. Manufacturing growing wonderfully. Improved land averages $9; unimproved, $5, and woodland $18 per acre. Inducements to settlers first-class.

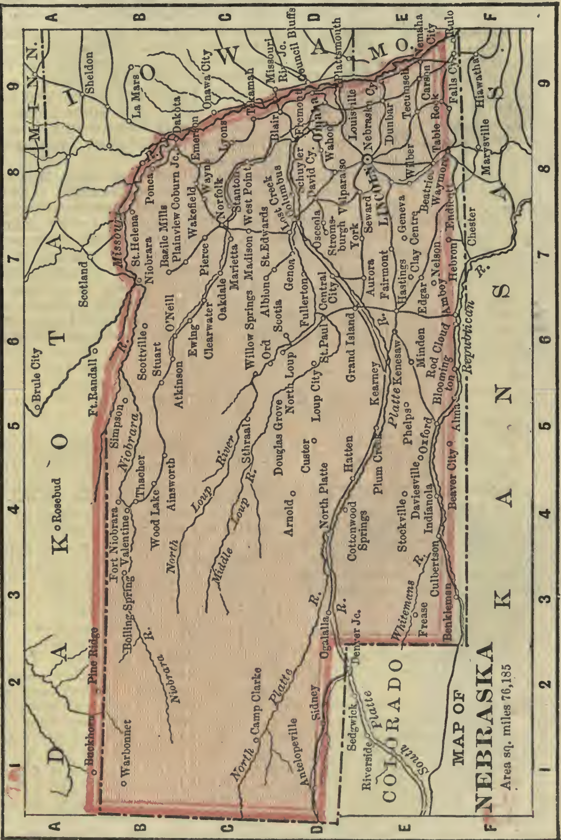
CLIMATE dry, salubrious and free from malaria. Temperature averages, summer, 73 deg., winter, 20 deg. Rainfall east of 100th meridian, including snow, 25 inches; heaviest in May; at west, precipitation falls to 17 inches. Rainfall gradually increasing.

CHIEF CITIES. Omaha, U. S. port of delivery, commercial center, pop. 61,835; Lincoln contains State University, pop. 20,004; Plattsmouth, pop. 5,796; Nebraska City, 5,597.

LEADING INDUSTRIES.—Agriculture, cattle-raising, dairying, manufacturing, etc.

PROPERTY EXEMPT from exection: Homestead $2,000, and 160 acres land or two town lots, $500 in personal property if

debtor owns no land, apparel, 6 months' supplies, 3 months' feed for animals, furniture and tools. Exemption not good against wages. Assignments can prefer wages only, and do not release debtor. Suits barred after 10 years for land, after 5 years on contract or foreign judgment, after 4 years for recovery of personality and for fraud, after 1 year for assault. Wife's property



not gift of her husband exempt; her note not good. She can make will. Arrest for debt may be made when intent to defraud is shown.

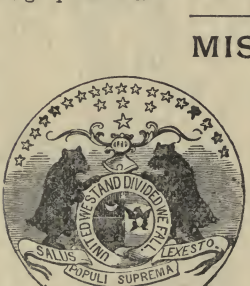
LICENSE CHARGES per year: Peddlers, $30 for entire state, issued by county clerks.

LIENS hold for 2 years for labor and materials on structure and ground if filed in clerk's office within 4 months. Judgments are liens on real estate.

GOVERNMENT LANDS reaching a very large aggregate area are open to entry in Nebraska, chiefly in the north and west, and, while picked over in sections, offer good opportunities. The LAND OFFICES are located at Neligh for the counties of Boone, Wheeler and Holt; and the territory west of said counties to Range 20; at Beatrice (land all taken); at McCook controlling 800,000 acres surrounding vacant lands; at North Platte for Lincoln, Keith and Cheyenne and the west half of Dawson and Custer counties, and the territory north of Lincoln and Keith, south of Cherry and east of Cheyenne, two-thirds of the entire district being vacant; at Bloomington (comprising Adams, Webster, Kearney, Franklin, Phelps, Harlan, Furnas counties, all of Hall south of the Platte river, south half of Cooper and three southeast townships of Frontier) only odds and ends remain; at Valentine, Lincoln, Nebraska and Grand Island for districts around each. The lands in Nebraska are subject to cash, timber culture, pre-emption and homestead entry.

STATE LANDS include about 1,450,000 acres of educational lands, and lie in sections 16 and 36 in each township, to which should be added about 25,000 acres of University lands. The lands are controlled by the commissioner of public lands, with office at Lincoln. These lands are leased at a rental of at least 6% on valuation, or sold either at public or private sale, but not more than 640 acres to one person. No appraisement can be made at less than $7 per acre, and no sale made for less than the appraisement; terms, ⅒ cash for prairie, ⅕ cash for woodland, balance in 20 years at 6% interest, payable yearly. The county treasurer is agent for the lands in his county. Railroad lands are for sale in large quantities.

MISSOURI.



Name means "Muddy River." Originally French territory, settled by French first at St. Genevieve, 1755. Became Spanish property, 1763. St. Louis settled under the French. Returned to France. Acquired by United States by Louisiana purchase, 1803. Organized as territory under present name, 1812, included Arkansas, Indian Territory, etc. Admitted, March, 1821. Eleventh state admitted. Admission aroused much discussion. "Missouri Compromise" effected and state permitted to retain slavery. State divided on secession and was scene of perpetual internal warfare. Battle Wilson Creek Aug., 1862 Martial law declared Aug. 31. New Constitution adopted, June, 1865. Another, Oct., 1875. Union soldiers furnished, 109,111. Number counties, 115. Miles railroad, 4,710. State officers elected quadrennially, and legislature every two years. All elections Tuesday after first Monday in November; number senators, 34; representatives, 141; sessions of legislature biennial, in odd-numbered years, meeting Wednesday after January 1; holds 70 days; term of senators, 4 years; r presentatives, 2 years. Number electoral votes, 16; congressmen, 14; number voters, 541,207. United States Army and inmates of asylums, poorhouses and prisons, excluded from voting. Number colleges, 17; school age, 6-20; school system, good; endowments large. Legal interest rate, 6%; by contract, 10%; usury forfeits entire interest.

POPULATION, 1880, 2,168,380; male, 1,127,187; female, 1,041,193; native, 1,956,802; foreign, 211,578; white, 2,022,826; colored, 145,350; Chinese, 91; Indians, 113. Estimated increase, 12½%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 275 miles. Average width, 246 miles. Area, 68,735 sq. miles, 43,990,400 acres. Surface N. of Missouri river alternately level and rolling prairies with deep, broad river valleys and a general southeasterly slope. Soil variable, but generally good. Bottoms extremely productive, but suffer from over-

flows in parts. South of the last named river the surface is more broken with hills, sometimes 1,000 feet high. The most noted, Iron Mountain and the Ozarks. West of Ozarks is a prairie region with wide, deep, fertile valleys. Soil here also good, except where too rugged. Chief rivers, Mississippi (500 miles), Missouri, Osage and Gasconade. Entire area well watered by small streams, springs, etc. Chief crops, corn, wheat, oats,

potatoes, tobacco. Fruits do splendidly. Peaches especially fine. Vegetable gardening very successful. Improved land averages $12, unimproved, $7 per acre. Coal, iron, marble, granite, limestone, lead and copper found in enormous deposits. Lead area 5,000 sq. miles. Forests magnificent. Growth walnut, poplar, oak and the hardwoods; grazing a leading business both in extent and profit. Stock of all kinds raised with success. Inducements to settlers first-class. State ranks first in mules; third in oxen, hogs, corn and copper; fifth in iron ore.

CLIMATE variable, with sudden changes, but generally pleasant and healthy. Summers are long and warm, but not enervating. Winters moderate, with occasional severe days. Average temperature, summer, 76 deg.; winter, 39 deg. Rainfall greatest in May, averages 34 inches.

CHIEF CITIES.—St. Louis, largest city west of the Mississippi, port of entry and great commercial and manufacturing point; pop. 460,000. Capital, Jefferson City; pop. 55,785. Pop. St. Joseph, 35,431; Kansas City, 192,000.

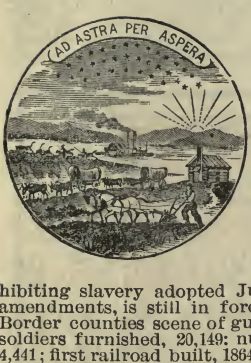
LEADING INDUSTRIES.—Agriculture, mining, manufacturing, quarrying, grazing, fruit and vegetable growing, lumbering, etc.

PROPERTY EXEMPT from execution: Apparel and tools, and to head of family 10 hogs, 10 sheep and their product, 10 ewes, 10 calves, 4 plows, axe, hoe, harness, farm implements, $150 in work stock, 25 lbs. each of hemp, flax and wool and devices for manufacturing same, $100 in household furniture, books, tools, homestead to $3,000 and 18 sq. rods of ground in cities of 40,000 pop.; to $1,500 and 30 sq. rods ground in cities 10,000 to 40,000 pop.; in other towns, to $1,500 and 5 acres, and in country to $1,500 and 160 acres. Assignments do not release debtors. Suits barred after 10 years for land and on written contracts, after 5 years on account, verbal contract and fraud or trespass: after 2 years for libel, assault, etc. Wife's property exempt, except for necessaries; must hold through a trustee. She can buy, sell, make notes, etc. No arrest for debt.

GOVERNMENT LANDS to an area of about 1,200,000 acres are yet open to cash, homestead and pre-emption entry in Missouri. THE LAND OFFICES are at Booneville for Benton, Cedar, Crawford, Camden, Dallas, Henry, Hickory, Laclede, Maries, Miller, Osage, Phelps, Polk, Pulaski and St. Clair counties, including about 340,000 acres, two-thirds in Camden, Benton and Pulaski; at Ironton for Butler, Bollinger, Carter, Crawford, Cape Girardeau, Dent, Dunklin, Howell (200,000 acres), Iron, Madison, Mississippi, New Madrid, Oregon (60,000 acres), Penniscot, Perry, Pulaski, Phelps, Reynolds, Ripley, Scott, Shannon (50,000 acres), Stoddard, St. Francois, St. Genevieve, Texas (250,000 acres), Washington and Wayne, in all about 700,000 acres); at Springfield for the rest of the state.

STATE LANDS include School lands, over 200,000 acres, held at an average of about $3 per acre and sold by the counties to the highest bidder; a large area of Swamp land and some small tracts of Internal Improvement land. Information as to location may be had of the county officers or the register of lands at Jefferson City.

KANSAS.



Name Indian, means "Smoky water." State named for Kansas river. Called the "Garden State." Visited by Spaniards, 1541; by French, 1719. Acquired of France by United States, 18.3, by "Louisiana purchase." Formed part of Indian territory. Kansas territory organized, May, 1854. Law known as "Missouri Compromise," forbidding slavery in states formed out of Louisiana purchase north of latitude 36 deg. 30 min. repealed, and question of slavery left to the territory. At first it was decided for slavery. Constitution framed by legislature at Wyandotte prohibiting slavery adopted July, 1859; ratified Oct. 4, and with amendments, is still in force. Admitted as a state, Jan., 1861. Border counties scene of guerilla warfare on both sides. Union soldiers furnished, 20,149: number counties, 106; miles railroad, 4,441; first railroad built, 1864, 40 miles long. All elections, Tuesday after first Monday in Nov.; senators, 40; representatives, 125; sessions biennial, meeting second Tuesday in Jan. in odd-numbered years; limit of session, 50 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 9; congressmen, 7; voters, 265,714. Idiots, insane, convicts and rebels excluded from voting. Number colleges, 8; number schoolhouses, over 8,000; school age, 5-21 years; school system magnificent; endowment immense. Legal interest, 7%; by contract, 12%; usury forfeits excess of interest.

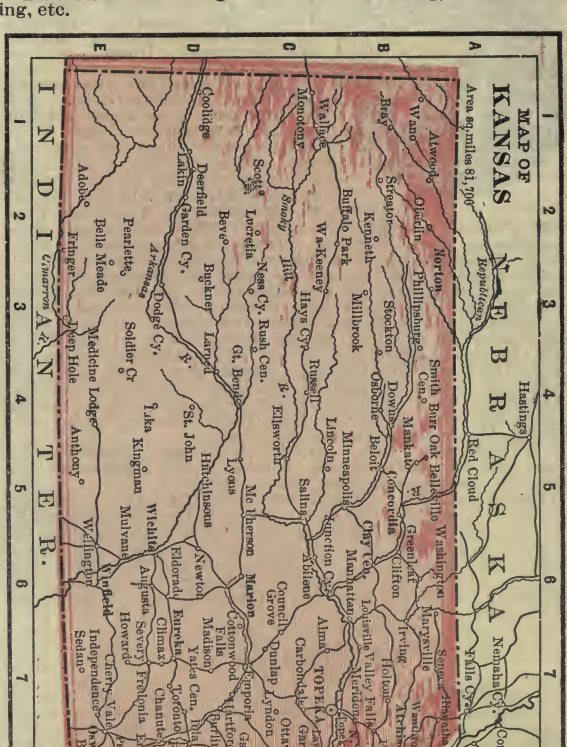
POPULATION. 1885, 1,406,738; male, 736,667; female, 670,071; native, 1,086,010; white, 952,155; colored, 43,107; Chinese, 19; Indians, 815. Estimated increase, 10%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 410 miles; breadth, 210 miles; area, 81,700 sq. miles; 52,288,000 acres. Surface, slightly undulating plain, with a gradual slope from west to Missouri river. Highest land, 3,800 ft.; lowest (at mouth Kansas river), 750 ft.; average elevation, 2,300 ft. No mountains. Scenery rather beautiful than grand. Bluffs 300 feet high on Arkansas and Republican rivers. Main rivers, Missouri, Kansas, Republican, Smoky Hill, Saline, Solomon, Arkansas, Osage, Neosho and Cottonwood. There is little navigable water. Water powers of fair proportions and number exist. Small streams are moderately numerous at east; less so at west, and irrigation necessary in large sections. Coal area of moderate extent; veins usually thin; quality fair. Soil usually fine; always so in valleys; patches of hard pan occur. Corn, wheat, oats, hemp, flax and rye, staples. Castor beans and cotton grown successfully. Soil of prairies deep loam of dark color; bottoms sandy loam. Peculiarly favorable to stock-raising. Prairie pastures broad and rich in nutritious grasses. Dairying favored. Fruits moderately successful. Forests small; limited to fringes of oak, elm, cottonwood, hickory, etc., on streams and artificial groves. Limestone and colored chalk furnish building materials. Value improved land averages $12 per acre, woodland $15. Manufacturing growing. State ranks fifth in cattle, corn and rye. Homes easily made.

CLIMATE salubrious; winters mild; summers warm: air pure and clear. Temperature averages, winter, 31 deg.; summer, 78 deg.; ranges 8 deg. below to 101 deg. above zero; such extremes exceptional. Rainfall averages 45 inches at east, 33 inches at west. No malaria.

CHIEF CITIES.—Leavenworth, pop. 29,268; Topeka (capital), pop. 23,499; State University at Lawrence; state asylums for insane and feeble-minded at Topeka and Ossawattomie; institution for education of the blind, Wyandotte; for deaf mutes, Olathe.

INDUSTRIES.—Agriculture, stock-raising, manufacturing, etc.



PROPERTY EXEMPT from execution: Homestead, 160 acres or 1 acre in town, with all improvements; books, pictures, musical instruments, apparel, beds; stoves and their furnishings; sewing machine, spinning-wheel, implements of trade; $500 in other household furniture; 2 cows, 10 hogs, yoke oxen and horse or team, 20 sheep, 1 years' food for stock, wagons, farm implements, etc., to $300, supplies for 1 year, stock in trade to $400, and library

of profession and office furniture. Assignments do not release debtor and cannot prefer. Suits barred after 15 years for land unless sold under execution or by executor: after 5 years if sold for taxes and on written contract; after 3 years on verbal contract or statute liability; after 2 years for trespass, injury or fraud; after 1 year for slander, assault, and after 5 years for actions not otherwise provided for. Wife's property, not gift of husband, exempt. She controls same as if single and can do business. No imprisonment for debt except for fraud.

LICENSE CHARGES may be fixed by cities.

LIENS hold on property for materials and labor furnished for construction or trees planted thereon if filed in 4 months and sued on in 1 year. Sub-contractors have liens to amount due contractor. Judgments are liens on real estate for 5 years.

GOVERNMENT LANDS to a very large area are still vacant subject to cash, homestead, pre-emption and timber culture entry. The LAND OFFICES are at Larned for the counties of Rice, Barton, Stafford, Pratt, Pawnee, Edwards and Hodgeman, containing about 35,000 acres, mostly indifferent land, besides the Osage reservation, about 500,000 acres, including many good tracts; at Oberlin for the counties of Norton, Graham, Decatur, Sheridan, Thomas, Sherman, Cheyenne and Rawlins, containing 1,700,000 acres, chiefly in the last four counties; at Topeka (lands about exhausted); at Kirwin for Jewell, Mitchell, Lincoln, Smith, Osborne, Phillips, Brooks, Graham and Norton counties, containing about 40,000 acres, chiefly in Graham and Norton; at Independence, (land about all taken); at Concordia, (only a few scattering tracts remain); at Salina for Ottawa, Saline, Lincoln, Ellsworth, Russell, Davis and Chase counties, containing about 8,000 acres rough land; at Garden City for Hodgeman, Ford, Seward, Finney and Hamilton counties, and contains about 4,500,000 acres vacant land; at Wakeeney for Rooks, Ellis, Rush, Graham, Trego, Ness, Sheridan, Gove, Lane, Thomas, St. John, Scott, Sherman, Wallace, Wichita and Greeley counties, and east 8 townships of Chautauqua, Elk and Greenwood, and west 10 of Barber, and embraces some 60,000 acres, chiefly Osage trust lands.

STATE LANDS include School lands (1,400,000 acres) lying in sections 16 and 36, sold by the county treasurer at public auction at actual appraised value, the purchaser paying one-tenth cash and balance at pleasure within 20 years, paying 6% interest annually on same. If offered and unsold they may be bought by settlers at private sale in tracts not to exceed 160 acres to one person. A large area of railroad lands are also available at low values.

ARKANSAS.

Name Indian, means "Smoky water." Called the "Bear State." Visited by De Soto; by Marquette and Joliet, 1673. Settled at Arkansas Post by French, 1685. Formed part of grant of Duke of Orleans, regent of France, to John Law. Acquired by Spain, 1763. Reacquired by France, 1800. Sold to U. S., 1803, as a part of Louisiana territory. Separated from Louisiana and became part of Missouri territory, 1812. Arkansas territory organized, 1819. Admitted as a state, June 15, 1836. Slavery acknowledged. Seceded May 6, 1861. Witnessed considerable fighting during the war, but no great battles. New constitution adopted, 1868. Re-entered Union, June 22. Present constitution adopted

1874. Number counties, 75. Miles railroad, 1,764. State elections biennial, in even-numbered years, first Monday in Sept.; number senators, 31; representatives, 94; sessions of legislature biennial, in odd-numbered years, meeting second Monday in Jan., holding 60 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 7; congressmen, 5; voters, 182,977; native

white, 129,675; foreign white, 6,475; colored, 46,827. Idiots, Indians, convicts not voting. Number colleges, 5; school system, progressive; school age, 6-21. Legal interest rate, 6%; by contract, 10%; usury forfeits principal and interest.

POPULATION, 1880, 802,525; male, 416,729; female, 386,246; native, 792,175; foreign, 10,350; white, 591,531; colored, 210,606: Estimated increase, 20%. (Continued on page 194.)

INDIAN TERRITORY.

Acquired by Louisiana purchase from France 1800; set apart for peaceful tribes. Organized 1834; no territorial government. Government in hands of tribes which include Cherokees and

Creeks, removed from Georgia 1838; Chickasaws, Natches, Arkansas and Choctaws, from Gulf region; Sacs, Illinois, Foxes and Pottawatomies, from Illinois; Seminoles, from Florida; Miamis, from Ohio; Iowas, from Iowa; Osages, Pawnees, Kiowas, Comanches, from various sections; Arapahoes and Cheyennes, from Montana, and Modocs, from Oregon, and others, numbering twenty-two in all. Also contains Oklahoma and public land strip.

(Continued on page 195.)

NEW MEXICO.

Origin of name not definitely known. Supposed to be that of Aztec god. Settled earlier than any other part U. S. Visited by Alvar Nunez before 1537. Explored, 1539 and 1581, by expedition

from Mexico in search of gold. Permanent settlement, 1596. Santa Fe, then an Indian town, chosen as seat of Spanish government. The natives were enslaved and forced to work in the fields and mines. They made progress in the arts of civilization and still retain traces of their acquirements. They revolted, 1680; expelled whites and destroyed churches, etc. Santa Fe reoccupied by Spanish, 1694. Another insurrection, 1837. Santa Fe

(Continued on page 196.)

ARIZONA.

Visited by Spanish explorers, 1526. Mineral wealth found, but no important settlements effected because of hostile natives. Little attention paid the section by Spanish. All north of Gila

river ceded to U. S. by Mexico, by treaty of Guadaloupe Hidalgo, Feb. 2, 1848. Remainder acquired from Mexico by purchase under Gadsden treaty, Dec. 30, 1853. Formed part of New Mexico. Organized as separate territory, Feb. 24, 1863. Number counties, 11. Miles railroad, 906. All elections Tuesday after first Monday in Nov.; number senators, 12; representaves, 24; sessions of legis-

(Continued on page 197.)

COLORADO.

Named for Colorado river. Called "Centennial State," because admitted 1876. First explored by Vasquez Coronado for Spain, 1540. Region east of Rocky mountains formed part of Louisiana

purchased from France, 1803. Western portion acquired from Mexico by conquest, 1848. First exploration by Americans under Col. Z. M. Pike, 1806. Pike's Peak discovered. Col. S. H. Long's expedition, 1820, and John C. Fremont, "The Pathfinder," crossed Rockies, 1842-44. First American settlement near Denver, 1859. Mining begun. Organized as territory, Feb., 1861, out of parts of

(Continued on page 199.)

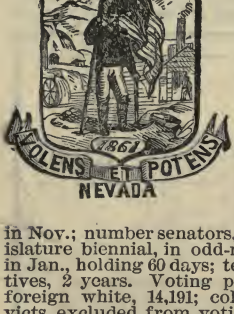
UTAH.

Belonged to Mexico, and acquired by U. S. 1848. Settled same year at Salt Lake by Mormons from Illinois. March, 1849, state of "Deseret" organized. Congress refused to receive con-

stitution adopted. Utah territory organized Sept. 1850, included Colorado, part of Wyoming and Nevada. Brigham Young, Governor. Troubles with government till 1858. Young removed, 1854, and Col. Steptoe appointed governor. The latter was resisted, and Young held office by force. Federal officers driven from territory, 1856. Alfred. Cummings appointed governor,

(Continued on page 200.)

NEVADA.



Name Spanish, meaning "Snow Covered." Called "Sage Hen State." First settlements in Washoe and Carson valleys 1848, by Mormons. Gold discovered, 1849. Silver, 1859, and brought a flood of emigration. Territory organized out of part of Utah, March, 1861. Received additional territory from Utah, 1862. Admitted as state, Oct. 1864. Area increased May, 1866, to present extent, by additions from Utah and Arizona. Number counties, 15. Miles railroad, 948. Governor and State officers elected quadrennially, and legislature every 2 years, on Tuesday after first Monday in Nov.; number senators, 20; representatives, 40; sessions of legislature biennial, in odd-numbered years, meeting first Monday in Jan., holding 60 days; term of senators, 4 years; of representatives, 2 years. Voting population, 31,255; native white, 11,442; foreign white, 14,191; colored, $5,622. Idiots, insane and convicts excluded from voting. School age, 6-18 years. Legal interest rate, 10%; by contract, any rate.

POPULATION, 1880, 62,266; male, 42,019; female, 20,247; native, 36,613; foreign, 25,653; white, 53,556; colored, 488; Chinese, 5,416; Indians, 2,803.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length N. and S., 485 miles; width, 320 miles; area, 109,740 sq. miles, 70,233,000 acres; two-thirds unsurveyed. Surface elevated table land, averaging 4,500 feet above the sea, and traversed by mountain chains north and south, reaching an elevation of 5,500 feet to 13,000 feet. Sierra Nevadas at West. Humboldt longest river (300 miles); other principal streams the Colorado. Several smaller streams which sink in earth or end in lakes. Lake Tahoe, 1,500 feet deep, 10x22 miles in area, and 6,000 feet above sea, temperature, year round, 57 deg.; other notable lakes, Humboldt, Pyramid, Walker; many smaller lakes, a large proportion of which have brackish water. A feature is the "mud lakes" (some 100 sq. miles in area), which are thick alkaline deposits in dry season, with one or two feet of water in the wet season. Many mineral springs, both warm and cold, exist. Great part of surface unavailable for cultivation. Considerable areas of grazing land (estimated at ⅓ entire state); many valleys offer a rich, easily worked and prolific soil. Corn, wheat, potatoes, oats and barley, staple crops; horses, mules, cattle, hogs and sheep, do well. Forests extensive and valuable. Mineral resources enormous, Comstock lode supposed to be richest silver mine in the world; Eureka one of the most productive. Amount of gold produced, 1882, $2,000,000; silver, $6,750,000. Rich in lead and copper; zinc, platinum, tin and nickel, plumbago, manganese, cobalt, cinnebar, etc., found. Extensive deposits of borax in Churchill and Esmeralda counties. Coal and iron exist. Ranks second in gold; fourth in silver. Kaolin, building stones, slate, soda and salt are obtained. But little land improved. Government land everywhere. Rivers full of fish.

CLIMATE mild in valleys; little snow except on mountains. At north mercury sometimes falls to 15 deg. below zero; air bracing; health good; at south frosts rare; extremes of cold unknown; summer heat occasionally reaches above 100 deg.; temperature averages, summer, 71 deg.; June hottest month; winter, 36 deg. Rainfall slight, chiefly in spring.

CHIEF CITIES.—Virginia City chief commercial center, pop. 10,917. Carson City (capital), and contains a branch mint, pop. 4,229.

LEADING INDUSTRIES.—Mining, reducing ores, lumbering, agriculture, etc.

PROPERTY EXEMPT from execution: Chairs, desks and books, $100; necessary household effects; apparel; 30 days' provisions and fuel; farm utensils, 2 oxen or team and harness, 2 cows, wagon, 30 days' food for stock; seed, $400; tools,

books, etc., of trade or profession; dwelling of miner, $500; outfit of miner, $500; sewing machine, arms, etc.; homestead to $5,000. Assignments may be voluntary or forced and release debtor if there is no fraud, and 30% dividend is paid, if ¾ creditors representing ⅛ debts agree. Suits barred after 5 years for land, 2 years for mining claims, 6 years on written contracts and judgment, 4 years on accounts and verbal con-

tracts, 2 years for slander or assault. Wife's property acquired before marriage subject to her separate control and exempt from husband's debts. Arrest for debt may be made in cases of fraud or concealment.

LICENSE CHARGES per month: Peddlers on foot, $10; with cart, $20. Licenses issued by county auditor. Drummers' tax, $250 on liquor salesmen; cigars and tobacco, $150; boots and shoes, $75; all others, $100 per year.

LIENS hold for 6 months on structures for labor and materials, and on wood for cutting if filed in 60 days or by subcontractor in 30 days. Judgments hold real estate 2 years.

GOVERNMENT LANDS comprise the greater portion of the state and are open to entry under the various forms known to the law. The greater portion of these are not suited to agriculture and much that is so requires irrigation. THE LAND OFFICES are at Eureka for all that portion of the state east of range 40 east of Mt. Diable meridian and includes both minimum and double minimum lands; at Carson City for the rest of the state.

STATE LANDS include 1,750,000 acres **School** lands (all farming timber or grazing). They are sold in tracts of 40 to 640 acres at $1.25, whether within or without the limits of railroad grants, one-fifth down, balance in 25 years at 6% interest payable yearly, except for timbered lands, which must be paid for in cash at $2.50 or $1.25 per acre according to quality of timber. There are also considerable bodies of **Internal Improvement, Agricultural College, University, Public Building and State Prison** lands. All state lands are controlled by the State Land Office at Carson City. **Railroad** lands are also in the market upon a large scale.

CALIFORNIA.

Name Spanish, means Hot Furnace. Called "Golden State." Visited by Cortez about 1550. First settled by Spanish at San Diego, 1768. Owned by Spain and formed part of Mexico, and with latter became independent of Spain, 1822. Chief trade in furs about this time. Few settlers. Fremont's expedition to Settlers' Fort on the Sacramento, 1841. His reports aroused interest in the section. Immigration set in. Acquired by U. S. from Mexico by conquest, 1848. Gold discovered, 1848. Rush of immigration set in, 1849. State cons itution, without the preliminary of a territorial organization, framed, Sept., 1849. Admitted as a state, Sept. 9, 1850. Indians and Mexicans disappearing rapidly. Constitution revised, 1878. Number counties, 52 Miles railroad, 2,911. Governor and state officers elected quadrennially, and legislature every two years; number senators, 40; representatives, 80; sessions of legislature biennial, in odd-numbered years, meeting first Monday after Jan. 1; holds 60 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 8; congressmen, 6; white voters, 262 583. Idiots, Indians, convicts and Chinese excluded from voting. School system, very fair; school age, 5-17. Legal interest, 7%; by contract, any rate.

POPULATION, 1880, 864,694; male, 518,176; female, 346,518; native, 571,820; foreign, 292,874; white, 767,181; colored, 6,018; Chinese, 75,132; Indians, 16 277. Estimated increase, 18%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length N. and S., 725 miles; width, 330 miles; area, 155,-

980 sq. miles, 99,827,200 acres. Coast line, over 800 miles. San Francisco Bay (40 miles long, 9 wide) magnificent harbor. Much of state mountainous. Coast range and Sierra Nevadas run entire length of state and are connected by cross ranges. Between ranges are the San Joaquin and Sacramento valleys. Yosemite, in the Sierras, one of the greatest natural wonders of the world and

the greatest marvel of the state, where scenery is always grand or beautiful. Mt. Whitney, 15,000 and Mt. Shasta 14,400 feet, highest peaks. Sierras average 8,000 feet. Coast range, 3,000. Chief rivers, Sacramento, San Joaquin, Klamath and Colorado. Principal lakes, Mono, Tahoe, Tulare. Very rich agriculturally and in minerals. Soil warm, genial and rich. Two crops may be raised in a season. Irrigation necessary in parts and almost always desirable; effected by canals and artesian wells. Wheat most

valuable crop; all cereals, root crops and grasses do well; corn, barley, grapes, fruit, nuts, silk, hops and oats staples. Mineral deposits include gold, silver, iron, copper, mercury, coal, stones, salt, soda, etc. Ranks high as a fruit-growing state; fruits of temperate climates, sub-tropical fruits and nuts, grapes, north to 41 deg.; olives, etc., grow to great perfection. Fine sheep-raising country; Cashmere goats introduced and succeed. Ranks first in barley, grape culture, sheep, gold and quicksilver; third in hops, fifth in wheat and salt. Noble forests of redwood and other valuable growths. Land runs from $1.25 to several hundred dollars per acre. Improved land averages $30 unimproved $7.50 per acre. It is the paradise of the small farmer. Plenty of room for men with a little something to begin on.

CLIMATE varies with elevation and latitude. Mild and pleasant on coast. Men work in shirt sleeves all the year. Average temperature at San Francisco in summer, 62 deg.; winter, 50 deg. Warmer in interior, reaching at times 100 deg. Rainfall, variable, from 7 to 50 inches at San Francisco. Average at S., 10 inches. Melting snow from mountains replaces rainfall. Frosts rare. Health unsurpassed.

CHIEF CITIES. San Francisco, port of entry; regular line of steamers to Australia, Panama, Mexico, China and Japan; pop. 300,000; Sacramento (capital), pop. 32,000; pop. Oakland, 40,000; San Jose, 17,567; Stockton, 15,282; Los Angeles, 25,000; U. S. navy yard at San Pablo Bay.

LEADING INDUSTRIES.—Agriculture, stock raising, fruit culture, mining, lumbering, etc.

PROPERTY EXEMPT from execution except for purchase recovery: Chairs, desks and books to $200; necessary furniture, etc.; sewing machine, apparel; 3 months' provisions, 3 cows and calves, 4 hogs and their pigs, feed for animals 1 month, $200 in seeds, etc.; 75 beehives, horse or vehicle of cripple, tools, books or instruments of calling; books of abstract, miner's cabin, to $500; mine to $1,000, 2 oxen, mules or horses, 1 wagon or vehicle, $25 in poultry, 30 days' earnings, $1,000 worth shares in homestead association if no homestead, life insurance (premium not more than $500 per year), arms, homestead, $5,000, to a single person, $1,000. Assignments cannot prefer and do not release. Release may be had under insolvent laws. Suits for land barred after 5 years, after 4 on written contracts, after 2 on simple contract, after 3 for fraud, after 1 for slander, libel, assault and seduction. Wife's property acquired before marriage subject to her separate control and exempt. She can do business if authorized by court. Arrest for debt can be made on declaration of fraud, removal or concealment.

LICENSE CHARGES per month: Peddlers (unless selling goods made in state) in wagon, $15; on foot, $5, to county auditor.

LIENS hold on premises for labor and material of all kinds if filed in 60 days, or in 30 by sub-contractor, and sued on in 90 days thereafter. Judgments hold real estate 2 years.

GOVERNMENT LANDS to over 40,000,000 acres remain unoccupied, chiefly in the mountains, barrens and foot hills. but includes much good land, and is subject to all forms of entry, except timber culture. The **LAND OFFICES** are at Bodie, Humboldt, Los Angeles, Marysville, San Francisco, Stockton, Shasta, Susanville, Sacramento and Visalia for surrounding districts.

STATE LANDS, also hilly and back from railways, are for sale at nominal figures; $\frac{1}{10}$ cash, balance in 10 years with interest. They are located in all parts of the state. A large area of railroad land is also offered.

WYOMING.

Indian name. First settlements, Ft. Laramie and Ft. Bridger, 1867. Included in Idaho, 1863, and organized as a territory from portions of Dakota, Utah and Colorado, 1868. Present number coun-

ties, 9; all elections, Tuesday after first Monday in Nov.; number senators, 12; representatives, 24; sessions of legislature biennial, in even-numbered years, meeting second Tuesday Jan.; hold 60 days; terms of senators and representatives, years each; voters, 10,180; native white, 6,042; foreign white, 3,199, colored, 939. Good school system started; school age, 7-21. Legal interest

rate, 12%; by contract, any rate. Reserve of land for school endowment when admitted as a state, one-eighteenth of entire area of agricultural lands. Miles of railroad, 1885, 616.

POPULATION, 1880, 20,789; male, 14,152; female, 6,637; native, 14,939; foreign, 5,850; white, 19,437; colored, 298; Chinese, 914; Indians, 2,400. Estimated increase, 40%.

(Continued on page 201.)

MONTANA.

Acquired from France 1803, but unexplored during first half present century. Gold discovered 1860. Formed part of Idaho, organized 1863. Separated from Idaho and organized as Montana territory May, 1864. Area increased, 1873, by 2,000 square miles cut

off Dakota. Capital first at Virginia City; removed to Helena 1875. Custer massacre June 25, 1876 (350 men of the 7th United States Cavalry annihilated by Sioux under Sitting Bull), on the Little Big Horn river. Number counties, 14. Miles of railroad, 1,047. All elections Tuesday after first Monday in Nov. Number senators, 12; representatives, 24; sessions of legislature biennial, in odd-

(Continued on page 202.)

IDAHO.

Acquired from France, 1803, by Louisiana purchase, visited by trappers, prospectors and missionaries in first half of the century. Gold discovered, 1860, in Oro Fino creek. Organized as territory March, 1863, out of parts of Nebraska, Dakota and

Washington territories, and included Montana and part of Wyoming. Present boundaries fixed, 1868. Present number counties, 14. All elections, Tuesday after first Monday in Nov.; number senators, 12; representatives, 24, sessions of legislature biennial, in even-numbered years, meeting second Monday in

(Continued on page 203.)

WASHINGTON.

Named for George Washington. First settlement at Tumwater 1845; preceded, however, by Hudson Bay Co.'s trading posts. Formed part of Oregon (which see); separated March, 1853, and organized as territory. Comprised all region from Pacific to

MAP OF WASHINGTON TY.
Population - - 75,116
Area sq.miles - -66,880
IDAHO
BRITISH COLUMBIA
OREGON
PACIFIC OCEAN
VANCOUVER ISLAND
Spokane Falls
Walla Walla
Colfax
Pullman
Dayton
Waitsburg
Prosser
Yakima
Ellensburg
Ahtanum
Kennewick
Pasco
Wenas
Ainsworth
Wallula
Umatilla
Castle Rock
Willow Forks
Vancouver
Olympia
Tacoma
Seattle
Port Townsend
Port Angeles
Port Gamble
Port Orchard
Port Discovery
Port Madison
Port Townsend
Port Townsend Bay
Port Townsend Entrance
Port Townsend Harbor
Port Townsend Inlet
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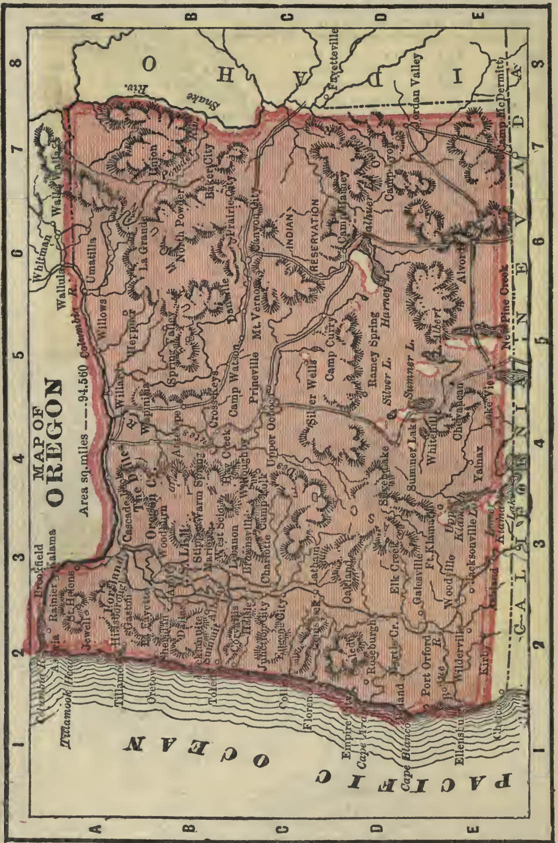
ALASKA.

Discovered by Vitus Behring, 1741, and became Russian territory by right of discovery. Called first Alayeska by natives, simplified to present form. Purchased by the United States for $7,000,000, 1867, as a deed of gratitude to Russia for her course in

civil war. Has paid five per cent on investment ever since, and promises to become the source of enormous mineral, fur, agricultural and timber wealth. Now beginning to be explored. Governor appointed by the president of the United States.

POPULATION—Whites, 2,000: Indians, estimated, Innuits, 18,000; Aleutian, 2,200; Ninneh, 4,000; Thlinket, 7,000; Hyda. 800.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length north and south, 1 200 miles; width, 800 miles. Area (estimated, unsurveyed), 531,409 sq. miles; Arctic division, 125,000; Yukon, 180,000; Kuskokvim, 115,000; Aleutian, 15,000; Kadiak, 75,000; Southeastern, 40,000. Yukon Chief river, 80 miles wide at mouth, navigable 340 miles; length about 1,300



miles; coast line, 5,000 miles, including bays. Aleutian and Sitka districts are the agricultural regions. Most fertile land near Cook's Inlet; good oats, barley and root crops are raised here without much difficulty. Rich grass land in the valley of Yukon, but extreme dampness and want of summer heat prevent the ripening of grain. Timber abundant on main-

land; yellow cedar the best, being of great value for boat-building. Edible berries are plentiful. A fine quality of white marble is found on Lynn Channel; coal, amber and lignite on Aleutian Islands, the best coal being on Cook's Inlet. Gold, silver, copper, cinnabar and iron are found; sulphur is abundant in volcanic districts. Noted for its fur-bearing animals, the chief of which are beaver, ermine, fox, marten, otter, squirrel and wolf. The main source of revenue is the fur seal, the taking of which is regulated by law. The walrus is of value in furnishing ivory and oil. Whales, cod, herring and halibut and salmon are abundant. Land not open to settlement.

CLIMATE.—Pacific coast modified by Pacific gulf stream and long summer days. Temperature at Sitka averages winter about that of Washington, D. C. Rainfall copious, and foggy weather common on coasts and islands; Sitka, one of rainiest places in the world outside the tropics, the annual precipitation 65 to 90 inches, rainy days 190 to 285 in year.

CHIEF CITIES.—Sitka, seat of Bishop of Greek church, and headquarters of governor. Pop. 995; white, 163; creole, 219; Thlinket, 613. Fort St. Nicholas, Cook's Inlet, Fort St. Michael and Norton's Sound are other main settlements. Harbors at Port Clarence, Michaelooski and Captain's Harbor.

INDUSTRIES.—Fishing, canning, trapping and mining.

OREGON.

Name Spanish; means "Wild Thyme." So named because of abundance of that herb. Visited by Capt. Robert Gray, of Boston, with ship Columbia, 1792, who anchored in the river named for his vessel. Trading post established at Astoria by Pacific Fur Co., 1811. By treaty, 1818, jointly occupied by United States and England, and included all Pacific coast region between 42 deg. and 54 deg. 40 min. north latitude. Population chiefly Canadian till 1833, when immigration from United States began. 49th parallel fixed as line between British possessions and United States. Oregon territory organized August, 1848, included Washington territory; the latter under title of "District of Vancouver" cut off, 1852. Indian troubles, 1844, '47 and '54. State constitution adopted, 1857. Idaho cut off and added to Washington territory, 1859. Oregon admitted as a state, 185 . Modoc war, 1873. Number counties, 25; miles railroad, 1,165. State officers elected quadrennially, and legislature every two years; number of senators, 30; representatives, 60; sessions of legislature biennial, in odd-numbered years, meeting first Monday in Jan.; holds 40 days; term of senators, 4 years; representatives, 2 years. Number electoral votes, 3; congressmen, 1; voters, 59,629, including women. United States army, idiots, insane, convicts and Chinese not voting. Number of colleges, 7; school age, 4-20; school system good. Legal interest rate, 8%; by contract, 10%; usury forfeits principal and interest.

POPULATION, 1885, 199,151; male, 103,210; native, 144,265; white, 163,075; Chinese, 9,510; Indians, 1,694. Estimated increase, 11%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Average length E. and W., 362 miles; average width, 260 miles, area, 94,560 sq. miles; 60,518,400 acres. Surface divided into E. and W. Oregon by Cascade mountains, 4,00 to 11,225 feet high. Principal peaks, Mt. Hood, 11,225; Jefferson, 10,200; Three Sisters,

9,450; Diamond, 9,420; and McLaughlin, 11,600 feet. Eastern Oregon, two-thirds entire state, mountainous; at N. and N. E. (Blue range), with wide rich valleys; less so at S. and S. E. Western Oregon includes Coast Range mountains, parallel with ocean, averaging 25 miles from same. Elevation 1,000 to 4,000 feet. Valleys throughout state deep, and scenery noble, including canons of enormous depth. Columbia river, 1,300 miles long; navigable 175 miles, full of cascades, and runs through entrancing scenery. Snake, Rogue and Umpqua are important streams; smaller ones numerous. Noted harbors, mouths of Columbia and Rogue rivers, Tillamook bay and Port Oxford. Lakes chiefly in Lake and Grant counties; Malheur, Harlay, Summer, Albert, Christmas, Goose, Silver, largest. Soil generally superior. Wheat the best crop; superior in yield and quality; other crops do well, as do also fruits and vegetables, etc. Extremely favorable to cattle and sheep. Rich in minerals; gold in Jackson, Josephine, Baker and Grant counties; copper in Josephine, Douglas and Jackson; iron ore throughout the state; coal along Coast range. Timber resources enormous, and but little touched Salmon fisheries among best in world. Improved land averages $17.50, unimproved, $4. Area, arable two-fifths state, forest one-sixth state.

CLIMATE in western Oregon moist; equable; rainfall, 59 inches. In eastern Oregon dry. Both pleasant and healthful, though subject to occasional extremes at east. Crops in east do not suffer, however, from drouth. At west snow and ice unknown, except on peaks, where it is perpetual. Frosts on high lands. Average temperature, summer, 65 deg.; winter, 45 deg.

CHIEF CITIES.—Portland, Astoria and Coos Bay, ports of entry; Roseburgh; Portland, pop. 30,000; Salem, capital.

LEADING INDUSTRIES.—Agriculture, grazing, mining, fishing, lumbering, fruit growing, canning, etc.

PROPERTY EXEMPT from execution: Books, pictures and musical instruments to $75; apparel, $100, or $50 for each member of family; tools, books, instruments, team, etc., necessary to occupation, $400; 60 days' feed, for all animals; to householder, 10 sheep and fleeces; 2 cows; 5 swine; furniture, etc., $300; 6 months' provisions. Assignment cannot prefer and does not release. Suits barred after 10 years for land, on judgment and sealed instrument, after 6 on contract, statute liability and injury to personal property, after 1 year for slander, assault, etc. Wife's property exempt. She can contract concerning same. No imprisonment for debt except in cases of fraud.

LICENSE CHARGES per year: Peddlers not less than $10 nor more than $200.

LIENS hold first year on structures for labor and materials, if filed. Judgments hold land 10 years.

GOVERNMENT LANDS in Oregon aggregate many million acres, chiefly timbered tracts in the mountains and foothills, but offering many desirable locations for homestead, cash or pre-emption entry. The LAND OFFICES are at The Dalles and Lake View, Oregon City, Roseburg and Le Grand for the regions contiguous to each.

STATE LANDS are offered to a considerable extent, as are also railroad grant lands. The price and terms for both are made with a view to assist settlers.

ARKANSAS.

(Concluded from page 176.)

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length N. and S., 240 miles; average breadth, 212 miles; area, 53,845 sq. miles, 34,460,800 acres. Surface low and level in eastern portion, gradually becomes more hilly toward west, and in the

Ozark mountains at northwest reaches an elevation of 2,000 feet. The extreme western portion is a high plain. The chief streams are: Mississippi (415 miles), Arkansas (600 miles in the state), Red, Ouachita, St. Francis and White, all navigable. Into the large streams flow innumerable lesser ones. The scenery is varied and frequently charming. Hot Springs (temperature, 140 deg.), great natural wonder and famous for medicinal properties. The soil varies, but the greater portion is exceptionally rich and suited to all crops, especially fruits, berries and gardening. Arkansas vegetables and fruits reach St. Louis and Chicago markets early and command best prices. State especially favorable to agriculture and emigration. All parts magnificently timbered. Pine, oak, cypress, cedar, hickory, walnut, linn, locust, chief growths. Cleared land averages $10 and woodland $3 per acre. Coal exists on the Ash river, iron in the Ozarks, salt near Ouachita. Oilstone (celebrated for quality) near Hot Springs; kaolin in Pulaski county. Staple products, corn, wheat, cotton, tobacco, oats, sweet potatoes, mules, tar, turpentine, lumber, etc.

CLIMATE genial; temperature ranges 15 deg. to 95 deg., on rare occasions going to 100 deg. Averages, winter, 45 deg.; summer, 80 deg. Rainfall, 44 in., heaviest in S. E., lightest in N.W. Health unsurpassed, especially in N. W.

CHIEF CITIES.—Little Rock (cap.), pop., 25,000. Hot Springs.

INDUSTRIES, 2,100 in number. Chiefly agricultural.

PROPERTY EXEMPT from execution: Apparel to unmarried persons, $200 in personal property; to heads of families, $500 in personality and homestead, 160 acres or one acre in town, not to exceed $2,500, tools of trade, etc. Assignment can prefer, but does not release debtor. Suits barred after 10 years on judgment and bond, 7 years for land, 5 years on note and written instrument, 3 years on verbal contract, and after 1 year for wrongful taking of goods. Wife's property exempt. She can dispose of same as if single.

LICENSE CHARGES per 6 months: Peddlers, $25 to state, and $25 to each county.

LIENS hold on buildings for labor and material if filed with county clerk in 3 months. Judgments hold land for 3 years.

GOVERNMENT LANDS to a very large area are yet open to homestead, cash and pre-emption entry, and include all classes of land found in the state. THE LAND OFFICES are at Little Rock, controlling 1,500,000 acres in a district extending 20 mile; east and 80 to 100 miles west of the city, and about 25 miles wides at Dardanelle, controlling 1,500,000 acres in Crawford, Franklin, Johnson, Pope, Logan, Yell, Scott, Sebastian, and parts of Perry, Garland, Saline and Montgomery counties; at Camden, controlling 1,600,000 acres in the counties of Polk, Pike, Sevier, Montgomery, Garland, Hot Springs, Clark, Howard, Hempstead, Little River, Miller, LaFayette, Columbia, Nevada, Ouachita, Calhoun, Bradley, Drew, Ashley, Union, and part of Dorsey; at Harrison, controlling 2,500,000 acres in remainder of state.

STATE LANDS about 1,000,000 acres, **Forfeited** lands held at 50 cents per acre; 14,000 acres **Internal Improvement** land; 15,000 acres **Saline** lands, some small tracts of **Seminary, State, Bank, and Real Estate Bank** lands; 70,000 acres of **Swamp** lands, and a large area of **School** lands. All except the latter are controlled by the Commissioner of State Lands at Little Rock. Forfeited lands are free to settlers who improve them.

INDIAN TERRITORY.

(*Concluded from page 177.*)

both of which are the subject of a move to open them to settlers. Each tribe elects officers, legislatures and courts, and criminals are punished as in the states. No laws for collection of debt. All land held in common, and any Indian may cultivate as much as

he wants, but one-quarter mile must intervene between farms. Whites can hold land only by marrying an Indian. Miles of railroad, 353. School system excellent; pupils educated and supported by the tribes, half entire revenue being set aside for the purpose. Three colleges, 200 schools.

POPULATION, 80,000; Cherokees, 20,000; Choctaws, 16,500; Creeks, 14,500; Chickasaws, 7,000; Seminoles, 2,500; Osages, 2,400; Cheyennes, 3,298; Arapahoes, 2,676; Kiowas, 1,120; Pawnees, 1,438; Comanches, 1,475. Two-fifths of entire population can read.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length east and west, 470 miles; average length, 320 miles; width, 210 miles; area, 69,991 miles, 44,154,240 acres. Surface, vast rolling plain sloping eastward. Mountains, Witchita, at S.W.; Ozark and Washita at east. Valleys timbered heavily with oak, ash, elm, sycamore, and other hard woods. Bluffs skirt valleys; uplands are prairie which at west lack fertility; N.E. section also well wooded, but rocky. Beautiful country to look upon. Principal rivers, Arkansas, Verdigris, Neosho, Illipois, Canadian, Cimarron, Black Bear, Little Arkansas, Poleau, North Fork, Red, Washita. Red and Arkansas only navigable. Small streams numerous at east, but scarce at west. South of Canadian river prairies very fertile: valleys rich and productive throughout territory; grass rich and heavy almost everywhere. Corn, cotton, rice, wheat, rye, potatoes are staples. Grazing interests large. Coal is found, but extent unknown. Furbearing animals numerous. Of the area Cherokees own 5,000,000 acres in N. and N.E.; Seminoles, 200,000 in E. central; Creeks, 3,215,495 in E.; Chickasaws, 4,377,600 in south.

CLIMATE.—Mild in winter, warm in summer. Temperature averages 41 deg. winter, 80 deg. summer. Rainfall, at east, 50 inches; center, 36; far west, 22. Health as good as anywhere in Union.

CHIEF CITIES.—Tahlequah, capital of Cherokees; Tishomingo, capital of Chickasaws; Tushkahoma, of Choctaws; Muscogee, of Creeks; Pawhuska, of Osages; Seminole Agency, of Seminoles; Pawnee Agency, of Pawnees; Kiowa and Comanche Agency, of Kiowas and Comanches.

LEADING INDUSTRIES.—Agriculture and grazing.

NEW MEXICO.

(*Concluded From page 178.*)

and all New Mexico conquered from Mexico, Aug. 18, 1846, and same ceded to U. S. by treaty Guadaloupe Hidalgo, 1848. Revolt, 1849, suppressed. Organized as Territory, 1850. Arizona added to the territory, 1853. Separated, 1863. 14,000 sq. miles cut off and added to Colorado, 1861. Santa Fe captured by Confederates, 1862, but soon abandoned. Number counties, 13. All elections, Tuesday after first Monday in Nov.; number senators, 12; representatives, 24: sessions of legislature biennial, in even-numbered years, meeting first Monday in Jan.; hold 60 days; terms of senators and representatives, 2 years each. Voters, 34,076; native white, 26,423; foreign white, 4,558; colored, 3,095. School age, 7-18 years. Legal interest rate, 6%; by contract, 12%. Miles railroad, 1878 to 1885, 1,191.

POPULATION. 1885, 131,985: male, 71,496; native, 111,514; white, 108,721; Indians, 9 772 Estimated increase, 1887, 10%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Average length N. and S., 568 miles; width, 335 miles. Area, 122,000 sq. miles, 78,400,200 acres. Elevation, 3,000 to 4,000 feet. Mountain peaks, 12,000 feet. Surface made up of series of level plateaus, traversed by mountains, with lofty peaks and fertile valleys. The Rocky mountains divide into two ranges, the one on the east, the loftier of the two ending near Santa Fe, and the other, the Sierra Madre, extending to the southward, to the Sierra

Madre of Mexico. Almost two-thirds of the Territory is east of this range. The region to the west consists of high table lands and isolated peaks. East of the eastern range the land slopes gradually to the Mississippi. The Staked Plain, an elevated region, unwatered and without wood, extends into the southeastern part of the territory. Principal rivers, Rio Grande Del-Norte, Pecos, Canadian, Gila, Mimbres and San Francisco. Small streams are few. None of the streams are navigable within the territory. Timber is scarce, except in a few sections. The mountains are clothed with pine, spruce and fir; cedar grows in foot hills, and cottonwood and sycamore in valleys. Soil rich where water can be had for irrigation or on streams. Corn, wheat, oats, alfalfa, grapes, vegetables, especially onions and root crops and semi-tropical fruits are prolific. Sheep raising very profitable. Grazing interests extensive. Gold found in Grant, Lincoln, Colfax and Bernalillo counties; rich copper mines in Bernalillo county, and in the Pinos Altos region. Zinc, quicksilver, lead, manganese, and large deposits of coal have been found. Irrigable surface, 7,000 sq. miles. Improved land only $\frac{1}{125}$ of territory. Woodland, $\frac{3}{100}$ of surface, unoccupied $\frac{77}{78}$ of surface. Room in all callings for enterprise.

CLIMATE varies with different elevations. Temperature averages, summer, 70 deg.; winter, 33 deg. Range of temperature, 4 deg. below zero to 90 degs. above. It is much warmer than the average in the lower altitudes, and colder in the higher. Air dry, rarefied and pure. Rainfall, 9 to 11 inches. Pneumonia sometimes prevails. Health average good.

CHIEF CITIES.—Santa Fe, capital, pop. 12,000. Las Vegas, Silver City and Albuquerque.

LEADING INDUSTRIES.—Mining, stock raising and agriculture.

PROPERTY EXEMPT from execution: To heads of families, apparel, beds and bedding, 30 days' fuel, school books, pictures, $25 in provisions, $10 in furniture, tools to $25, and homestead $1,000. No statute on assignment. Suits barred after 20 years on judgment, after 10 years for real estate, after 6 on notes, bonds and written contracts, after 4 on accounts, verbal contracts, etc. Wife's property exempt. She can do business. Arrest for debt permitted.

LICENSE CHARGES.—Drummers, $250 per year.

LIENS hold on buildings for labor and material if filed in 60 days and sued on in 1 year; on property for rent and freight. Judgments are liens on real estate.

GOVERNMENT LANDS include the greater part of the territory. **Land Offices** at Santa Fe and Las Cruces for their respective sections. All forms of entry apply. **Railroad** lands are offered in large quantities.

ARIZONA.

(Concluded from page 179.)

lature biennial, in even-numbered years, meeting first Monday in Jan., holds 60 days; terms of senators and representatives, 2 years each; voters, 20,398; native white, 9,790; foreign white, 8,256; colored, 2,352. School age, 6-21 years. Legal interest rate, 10%; by contract, any rate; no penalty for usury. School endowment in lands reserved very large.

POPULATION, 1880, 40,440; male, 28,202; female, 12,238; native, 24,391; foreign, 16,049; white, 35,160; colored, 155; Chinese, 1,630; Indians, 3,493. Estimated increase, 25%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length north and south, 378 miles; width 339 miles; area, 113,929 sq. miles, 72,914,560 acres; five-sixths unsurveyed. Surface at northeast and center elevated plateau 3,000 to 8,000 feet high,

with volcanic peaks reaching an altitude of 10,500 feet. Southern portion a plain, dipping occasionally below sea level, and rising only to a very moderate elevation (200 to 600 feet usually); mountains numerous; highest point San Francisco, 11,056 feet. Colorado only navigable river (navigable 620 miles). Flows between perpendicular walls cut in solid rock in places 7,000 feet high. Other important rivers the Gila, Little Colorado, Colorado Chiquito and Bill William's Fork. Smaller streams are only moderately supplied. Agriculture possible only in the valleys or where irrigation is practicable. One-twelfth of the territory may be successfully irrigated. Soil in valleys and bottoms very rich and prolific. Wheat, barley, potatoes, hay, corn, onions are staple field crops; corn follows wheat or barley, giving two crops yearly. Bottoms of Gila river and its tributaries possess largest area of farming land. Oranges and all semi-tropical fruits, grapes and berries do very well where water is obtainable. A large portion of the territory is covered with rich and abundant grasses, which afford nutritious grazing the year round, and cattle-raising is extremely profitable. Desert tracts of considerable area are found formed of shifting sands. Timber grows on the mountains, foot-hills, and along the streams. The varieties include pine and cedar on mountains; cottonwood, walnut and cherry on streams. Size of trees fair, and quantity large. On plains S. of the Gila only artemisia, cactus and mesquite are found. Abundant mineral wealth exists, which can now be developed with profit, owing to completion of railways; nearly all mountain ranges contain gold, silver, copper and lead. Superior quality of lime found near Prescott and Tucson; beds of gypsum in San Pedro valley; remarkable deposits of pure, transparent salt near Callville. Territory ranks second in production of silver. Opportunities in agriculture, fruit-raising and mining good.

CLIMATE exceptionally healthful, and generally mild, except in mountains; temperature averages 38 deg. winter, 73 deg. summer; much warmer at south, the thermometer reaching occasionally 115, and rarely falling below 35 deg. in winter. In central portion heat seldom exceeds 88 deg. to 90 deg; snow in mountains, but melts soon. Rainfall on Gila 6 inches; in foothills 28 inches; heaviest in July and August.

CHIEF CITIES.—Tucson, pop. 10,000. Prescott, the capital, pop. 6,000.

LEADING INDUSTRIES.—Mining, grazing agriculture, lumbering, smelting, etc.

PROPERTY EXEMPT from execution: Spinning wheels and looms, stoves, arms, etc., apparel, library to $150; to householder, 10 goats or sheep and fleeces thereof, 2 cows, 5 swine, 6 months' provisions, $600 in furniture, $600 in tools, stock, team, etc., of trade, 3 months' feed for animals, sewing machine, musical instrument, homestead to $5,000. No assignment laws. Suits barred after 5 years on judgment, after 4 on written contract, after 3 on statute liability and for frand, after 2 on account or verbal contract, and after 1 year for libel, slander and assault. Wife's property exempt. She can dispose of same as if single if 21 years old. Arrest for debt permitted when fraud is declared.

LICENSE CHARGES per month: Peddlers (unless goods made in Territory), $10; on foot, $5, to county treasurer. Drummers tax $200 per year. Tucson, $50 per quarter; Tombstone, $10 per day.

LIENS hold on structures and personalty for labor, material and repairs. Judgments are liens on real estate for 2 years.

PUBLIC LANDS.—The greater portion of Arizona is government land open to all forms of entry. The **LAND OFFICES** are at Prescott for the northern and at Tucson for the southern portions of the territory. Much railroad land is for sale.

COLORADO.

(*Concluded from page 180.*)

Kansas, Nebraska, Utah and New Mexico. Indian troubles 1863-4. Union soldiers furnished, 4,903. Admitted as a state, Aug. 1, 1876. Youngest state. Number counties, 39. No railroad in 1870. Mileage, 1885, 2 884. All elections, Tuesday after first Monday in Nov.; number senators, 26; representatives, 49; sessions biennial, in odd-numbered years, meeting first Monday in Jan.; limit of session, 40 days; term of senators, 4 years; of representatives, 2 years. Number electoral votes, 3; congressmen, 1; voters, 93,608; native white, 65,215; foreign white, 26,873; colored, 1,520. Convicts excluded from voting. Number colleges, 3; school system, fair endowment; school age, 6-21 years. Legal interest, 10%; by contract, any rate.

POPULATION, 1885, 243.910; male, 149.131: female, 94.779; native, 174,642; Chinese, 612; Indians, 154. Estimated increase since census of 1885, 10%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length E. and W., 380 miles; width, 280 miles; area, 103,845 sq. miles, 66,460,800 acres, three-fifths unsurveyed. Rocky mountains traverse state N. and S. with 3 ranges having many peaks more than 13,000 feet high. Within the mountains and surrounded by them are the "Parks" extensive level plains, 8,000 to 10,000 feet above the sea and valuable for agriculture. The mountains have extensive foot-hills. The plains form the eastern third of the state. They are somewhat alkaline, but make fine grazing grounds. Colorado scenery is famous. It is bold, striking and grand beyond words. Much rich soil along streams and wherever irrigation is possible. Public enterprises on a large scale looking to extensive irrigation under way. Cereals do very well. Corn, wheat, oats, hay, staple crops. Cattle, sheep and hog raising safe and profitable. Dairying pays, as does gardening. Timber resources moderate. Mountains fairly clothed with pine and other trees. Mineral wealth inexhaustible. State ranks first in silver, fourth in gold. Iron, soda, coal, copper, lead, stone, mica, etc., exist in large deposits. Principal rivers, Arkansas, South Platte, Snake, White, Green, Rio Grande Del Norte and Colorado.

CLIMATE dry and range of temperature comparatively small. Winters mild, summers cool. Average temperature, winter, 31 deg.; summer, 73 deg. Rainfall, mainly in May, June and July, averages 18 inches. On mountains winters severe, accompanied by heavy snowfall; violent winds common; fogs unknown. Health unsurpassed.

CHIEF CITIES.—Denver, capital and metropolis, and contains assay office; pop. 35,650; Leadville, 14,820; Silver Cliffs, 5,040; Colorado Springs, 4,226. State University at Boulder; Agricultural College at Fort Collins; School of Mines at Golden City.

LEADING INDUSTRIES.—Mining, smelting ores, agriculture, grazing, etc.

PROPERTY EXEMPT from execution: Furniture, $100; 6 months' provisions, tools and stock in trade, $200; library and instruments of profession, $300; work animals, $200; cow and calf, 10 sheep, 6 months' feed for same, wagon and $50 in harness, etc., homestead, $2,000, the word homestead being entered in margin of recorded title. Assignments cannot prefer, wages first paid to $50. Suits barred after 1 year for assault, slander and libel; after 6 years for judgments, and after 3 years on all other actions. Wife's property exempt. She can do business as if single. No imprisonment for debt.

LICENSE CHARGES per year: Peddlers, $5 to $100 as fixed by county commissioners.

LIENS hold on structures for labor and material if filed in recorder's office and sued on in 6 months. Judgments, if so filed, hold real estate in the county in which they are filed.

GOVERNMENT LAND constitutes a very large portion of the state and are subject to all forms of entry. The LAND OFFICES are at Central City for Gilpin, Clear Creek, Summit and a part of Boulder, Jefferson, Eagle and Grand counties, including over 2,500,000 acres; at Denver, Leadville, Pueblo, Del Norte, Lake City, Durango and Gunnison for the territory surrounding each. The lands are chiefly grazing or mineral, but a small area being suited to agriculture.

STATE LANDS to a large area are held for sale by the State Board of Land Commissioners at Denver at $1.25@$15 per acre.

UTAH.

(Concluded from page 181.)

1857, and 2,500 troops, under Albert Sidney Johnston sent to Salt Lake to support him. Mormons yielded. Young died, 1877. Succeeded in presidency of church by John Taylor, one of his 12 apostles. Number counties, 24. Miles railroad, 1,134. Territorial elections annual, first Monday in Aug.; number Senators, 12; Representatives, 24; sessions of legislature, biennial, in odd-numbered years, meeting second Monday in Jan.; holds 60 days; terms of senators and representatives, 2 years each. Voting pop., 32,773; native white, 13,795; foreign white, 18,283; colored, 695. School system, fair, school age, 6-18 years; number colleges, 1. Legal interest, 10%; by contract, any rate.

POPULATION, 1880, 143,963; male, 74,509; female, 69,454; native, 99,969; foreign, 43,994; white, 142,423; colored, 232; Chinese, 501; Indians, 807. Estimated increase. 15%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Average length, 350 miles; width, 260 miles. Area, 82,190 miles, 52,601,600 acres. Surface rugged and broken, with some rich valleys. Traversed by Wahsatch, Uintah, Roan, Little, Sierra Lasal, Sierra Abajo, San Juan, Sierra Panoches and Tushar mountains. Southeast portion elevated plateaus, western portion disconnected ridges. Chief streams, Colorado, Green, Grand, White, Uintah, San Rafael, Rio Virgin, Sevier and San Pete rivers. Many of lesser note. Great Salt Lake is 130 sq. miles in area. Other lakes, Utah, Bear, Sevier. In N. W. is a large area of desert land. Soil in valleys and on plateaus where irrigation possible very productive. Valleys of Cache, Salt Lake, Jordan, Sevier, Rio Virgin, etc., yield fine crops of cereals and vegetables. Wheat best crop. Fruits may be made successful. Grazing important interest. Dairying profitable and interest is growing rapidly. Forests sufficient for home purposes. Gold, copper and silver in Wahsatch mountains. Silver predominates. Coal in valley of Weber river. Salt found in large deposits and the lake supply inexhaustible. Territory ranks third in silver.

CLIMATE mild and healthy. Warmer W. of Wahsatch mountains. Summers dry and hot in S. W. Rainfall average 16 inches at S. and 17 at N., chiefly in Oct. and April. Spring opens in April. Cold weather begins late in Nov. In mountains winters severe and snows heavy. Temperature at Salt Lake averages, winter, 35 deg.; summer, 75 deg.

CHIEF CITIES.—Salt Lake City, capital; pop. 29,000. Ogden, pop. 8,069.

LEADING INDUSTRIES.—Mining, stock raising and agriculture.

PROPERTY EXEMPT from execution: Books and office fixtures, $100; necessary furniture, etc., 60 days' fuel and provisions, farm implements, 2 oxen, 2 mules or 2 horses and harness, cow and calf for every 5 persons in family, wagon, 60 days' feed for stock, seed to $100, tools, instruments and library of calling, $400 in outfit of miner and 30 days' supplies, sewing machine. To heads of families, in addition, 5 sheep for each member of family,

2 hogs, 3 pigs, 60 days' earnings, homestead, $1,000 and $200 cash for each member of family. No exemption from debts for purchase money. Assignments may prefer, but do not release debtor. Suits are barred after 7 years for real estate; after 6 on judgment; after 4 on written contract; after 3 for statute liability; after 2 on account, verbal contracts, etc.; after 1 for assault, slander, etc., after 4 in all other cases. Wife's property exempt. She can act as if single. Arrest for debt may be made in cases involving fraud.

LIENS hold, for labor and material, on structures and mines, if filed in 3 and sued on in 12 months. Judgments hold real estate for 5 years.

GOVERNMENT LANDS are open to the various forms of entry and include a large part of the territory. Desirable farming tracts scarce. The LAND OFFICE is at Salt Lake City for the entire territory.

WYOMING.

(*Concluded from page 187.*)

TOPOGRARHY, AREA, SOIL, PRODUCTS, ETC.—Length, 350 miles; width, 275 miles; area, 97,575 sq. miles; 62,438,000 acres. Surface traversed by Rocky mountains, forming the continental divide, and is high and mountainous, varying in elevation from 4,800 to 12,000 feet. The chief mountains are Mud River, Big Horn, Laramie, Bishop, Medicine Bow and the Black Hills (partly in Dakota). The chief streams are the Big Horn, Tongue, Powder, Green, Little Missouri, North Platte, Sweetwater, Snake and Big Cheyenne. At the N. W. is the Yellowstone National Park, 3,600 sq. miles in area, and one of the greatest natural wonders of the continent. It varies from 6,000 to over 12,000 feet in elevation, and its scenery is one vast panorama of Titanic mountains, gorges, spray-like streams, cataracts, cascades, geysers, etc. The greatest of the latter are the Beehive, Giantess, Giant, Grand, Old Faithful and Turban. Along the streams and in the valleys are tracts of arable lands, which may be made to produce prolifically with irrigation. The mountains are covered with pine and other forests of considerable extent, and in their bosoms are buried both precious and base minerals in great deposits. The soil where water can be had is good, but the surface is chiefly suited to grazing. Half the territory is grazing land. The resources are yet open to development. About one-seventh of the territory is surveyed, while less than one-fifteen-hundredth is improved. The opportunities are thus seen to be prime for settlers, miners, capitalists and farmers. Cattle ranges are occupied pretty well, but title to land ousts the possessors. Wheat, rye, oats and barley flourish, but frost too frequent for corn. Big Horn country, in N. W., area, 15,000 sq. miles; fine agricultural country; water plentiful; game and fur-bearing animals numerous; iron ore abundant, mainly red hematite; copper, lead, plumbago and petroleum found; gold, in the Sweetwater country and near Laramie City; valuable deposits of soda in valley of the Sweetwater. Coal abundant and of good quality at Evanston, Carbon, Rock Springs and other points.

CLIMATE cold; severe in mountains, milder in valleys. Healthful; air pure, dry and bracing. Rainfall, 15 inches. Temperature averages, summer, 66 deg., winter, 18 deg.; ranges from 31 deg. below to 89 deg. above. July warmest month; January coldest; latter averages 10 deg.

CHIEF CITIES.—Cheyenne (capital), pop. 6,500; Laramie City, pop. 4,800.

CHIEF INDUSTRIES.—Grazing, mining and agriculture; but little is done in manufacturing.

PROPERTY EXEMPT from execution: Apparel $150; to head of family, $500 in household furniture, etc., tools, stock in

trade, etc., used in calling, $300; homestead, $1,500. Creditors coming in under assignment must release assignor. Suits barred after 21 years for land, 5 on bond and written contract, 4 on verbal contract, and after 1 year for assault. Wife's property exempt, and she can act as if single. Arrest for debt allowed in cases of fraud, removal, concealment, etc.

LICENSE CHARGES per month: Peddlers, $25.

LIENS hold on structures for labor and materials if filed in 60 days and sued on in one year, and on property for transportation. Judgments hold real estate 3 years.

GOVERNMENT LANDS comprise almost the entire area of the territory, and are subject to all forms of entry. The LAND OFFICES are at Cheyenne and Evanston for their respective halves of the territory. Sections 16 and 36 are reserved for school purposes, but are not yet for sale.

MONTANA.

(*Concluded from page 188.*)

numbered years, meeting second Monday in Jan., holds 60 days; terms of senators and representatives, 2 years each. Voters, 21,544; native white, 12,162; foreign white, 7,474; colored, 1,908. School age, 4–21 years; graded schools in Deer Lodge City, Virginia City and Helena. School lands reserved for sale when territory becomes state valuable and extensive. Legal interest 10%; by contract, any rate.

POPULATION, 1880, 39,139; male, 28,177; female, 10,982; native, 27,638; foreign, 11,521; white, 35,385; colored, 346; Chinese; 1,765; Indians, 1,663; Indians on reservations, 19,791. Estimated increase, 60%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 540 miles; average width, 274 miles: area, 145,310 sq. miles, 92,998,400 acres, six-sevenths yet unsurveyed. Indian reservations, 24,150,000 acres, two-fifths good farm land, of which about 4,000 acres is cultivated. Eastern half, or three-fifths of territory, rolling plains, rest mountainous. Traversed by Rocky, Bitter Root, Snow and other ranges. Valleys average about 4,000 feet above sea. Peaks reach elevation of 12,000 feet. Plains descend from elevation of 4,000 feet at foot of mountains eastward to 2,000 feet at Dakota line. Jefferson, Madison and Gallatin rivers unite to form Missouri. Other great streams, Yellowstone, Missoula, Flathead, Big Blackfoot, Bitter Root, and Milk rivers. Flathead Lake 10 by 30 miles in area; many small lakes in northwest. Surface fairly supplied with small streams. Pine, cedar, fir and hemlock grow abundantly and to good size in mountains; cottonwood, elder and willow fringe streams. Timber supply ample. Soil good generally. Immense area of arable land. Wheat best crop (spring variety); oats, potatoes, hay, also staples. Too cold as a rule for corn. Area grazing land, over two-thirds territory. Grazing interests great. Splendid grazing grounds yet untaken. Mineral wealth great. Ranks fifth in silver and in gold. Price of land nominal. Chances for enterprising settlers superb.

CLIMATE dry. Rainfall about 12 inches. Warmer than same latitude farther east. Snows heavy in mountains; light in valleys and on plains. Temperature averages, summer, 62 deg.; winter, 18 deg. Colder in mountains. Health excellent.

CHIEF CITIES.—Three United States districts; court held twice a year at Helena, twice at Virginia City, pop. 3 500, and three times at Deer Lodge, pop. 2 500 Helena, pop. 7,000, capital and most important town.

LEADING INDUSTRIES.—Mining, lumbering, grazing, agriculture, smelting, etc.

PROPERTY EXEMPT from execution: Homestead, 160 acres, team, wagon, farm implements, tools of trade, books, etc.,

of profession, apparel, furniture necessary for family, etc. Suits barred after 6 years on judgments and written contracts, after 2 years on account. Wife's property exempt, except for necessaries of life for herself and children under 8 years old. By recording proper intention she can do business. Husband then not liable for her debts made in course of trade. Arrest for debt allowed in cases of fraud, willful injury, etc.

LICENSE CHARGES per year: Drummers, $100 for each county; Helena, $15 extra; Butte City, $10 extra; Missoula, $5 extra.

LIENS hold on property for labor and materials if filed in recorder's office in 90, or by sub-contractor in 30 days, and sued on by contractor in 12 and by sub-contractor in 3 months. Judgments hold real estate 6 years.

GOVERNMENT LANDS.—Almost the entire territory is government land open to all forms of entry. The LAND OFFICES are located at Miles City, Helena and Bozeman for the districts surrounding each. Sections 16 and 36 are reserved for the school fund, but are not yet on the market.

IDAHO.

(Concluded from page 189.)

Dec.; holds 60 days; terms of senators and representatives, 2 years each. Voters, 14,795; native white, 7,332; foreign white, 4,338; colored, 3,126. School age, 5–21 years. Legal interest rate, 10%; by contract, 18%; usury forfeits three times excess of interest. School endowments of land first-class. Miles railroad 811.

POPULATION, 1880, 32,610; males, 21,818; female, 10,792; native, 22,636; foreign, 9,974; white, 29,013; Indians, 165. Estimated inrease, 20%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Length, 140 to 490 miles; width, 45 to 286 miles. Area, 84,290 sq. miles, 53,944,600 acres. Five-sixths of area unsurveyed. Surface table land and mountains. The former, 2,000 to 5,100 feet above the sea, is traversed by high mountains and deep valleys. Chief mountains, Kootenai, Cœur d' Alene, Salmon, Clearwater, Bear River and Three Buttes. Chief rivers, Snake (navigable), Bruneau, Boise, Weiser, Payette, Shoshone (has a falls of 200 feet), Salmon and Clearwater. About one-twelfth is arable and one-tenth more grazing land. One-third is barren, but may in part be reclaimed by irrigation. Many lakes are found as well as numerous water powers. The mountains afford much pine and cedar, the forests being estimated at 9,000,000 acres. The soil, where water can be had, is fertile; there is also much fertile land at the extreme north. S. E. occupied by Mormons. Wheat, oats, rye, barley, potatoes and hay are good crops, and dairying and stock raising profitable. Markets afforded by mining camps. Corn not successful, season too short. Most of the gold is found in quartz veins in Idaho, Boisé and Alturas counties; silver, in Owyhee county; some of the mines being very rich. Wood river district on southern slope of Salmon River mountains, at headwaters of Wood or Malad river, gives promise of valuable mining operations, chiefly placers. Coal in vicinity of Boisé City. Territory ranks sixth in gold and silver. Land cheap, and may be had under various forms of entry. Scenery grand.

CLIMATE severe, with heavy snows in mountains; on plains less severe, but cold and bracing. In the valleys it is milder, with moderate snow fall. Summers cool and pleasant. Temperature averages 20 deg. in winter, 70 deg. in summer. Rainfall small in the Rocky and Bitter Root mountains, and very light at the N. and W. Irrigation essential. Health superior.

CHIEF CITIES.—Boisé City (capital), Florence, Silver City.

LEADING INDUSTRIES.—Mining, grazing, agriculture, smelting and lumbering.

PROPERTY EXEMPT from execution same as in California, except that only half as much life insurance is allowed. Assignments cannot prefer, but acceptance of dividend discharges debt. Suits barred after 5 years for lands and on written contract; 4 years on verbal contract; 3 years for recovery of goods and fraud. Wife's property separate and exempt; she can make good note and do business as if single. Arrest permitted for fraud, willful injury, concealment, etc.

LICENSE CHARGES.—Drummers $5 per trip at Lewiston.

LIENS hold on structures for labor and material, but subcontractors hold only to extent of amount due contractor. Claim must be filed in 30 and suit brought in 90 days.

GOVERNMENT LANDS comprise by far the larger part of the territory and are subject to the various forms of entry. They are largely mountainous, but include some good farming area. The LAND OFFICES are at Boisé City, Lewiston, Hailey and Oxford for the territory adjacent to each. Sections 16 and 36 reserved for school funds.

WASHINGTON.

(Concluded from page 190.)

Puget Sound Co's purchased. Islands in Washington Sound ceded to United States by decision of Emperor of Germany, arbitrator, 1872. Number counties, 33. Miles railroad, 675. All elections Tuesday after first Monday in Nov. Number senators, 12; representatives, 24; sessions of legislature biennial, in odd-numbered years, meeting first Monday in October. Terms of senators and representatives, 2 years each. Voting population, 27,610; native white, 15,858; foreign white, 8,393; colored, 3,419. Number colleges, 2; school age, 4–21 years; school endowment reserved large. Legal interest, 10%; by contract, any rate.

POPULATION, 1880, 75,116; male, 45,973; female, 29,143; native, 59,313; foreign, 15,803; white, 67,199; Chinese, 3,186; Indians, 4,405. Estimated increase, 25%.

TOPOGRAPHY, AREA, SOIL, PRODUCTS, ETC.—Extreme length E. and W., 341 miles; width, 242 miles; area, 66,880 square miles, 42,803,000 acres. Coast line nearly 200 miles. Divided into Eastern (50,000 square miles) and Western (20,000 square miles) Washington by Cascade mountains. Many high peaks, including famous Ranier, 14,500 feet high. Eastern Washington forms a fairly watered plateau, irregular and generally broken. The Blue mountains traverse the southeast corner. Western Washington includes Columbia river and Puget sound basins and Chehalis valley and the Coast Range of mountains. Columbia river (navigable 175 miles), Snake (navigable), Walla Walla, Spokane, Colville and Clarke's Fork chief streams. Excellent harbors in Puget sound, Admiralty Inlet and Hood's canal. Scenery, especially on Columbia, grand. Columbia river current overcomes tide at the mouth, and water in the bar drinkable. Soil of 30 per cent of total area favorable to agriculture. All cereals flourish, but corn not successful because too cold. Wheat, oats, hops, fruit of temperate climates, except peaches, are staples. Grazing region, entire section east of Cascades, covered with inexhaustible supply of bunch grass. Stock raising and dairying growing industries. Lumber resources unsurpassed. Enormous forests of majestic trees. Lumbering interests already large. Coal on Bellingham bay and at Seattle; area of coal-bearing strata, 20,000 square miles. Gold-bearing quartz and silver lodes in Cascade and Coast ranges. Copper, cinnabar, lead and other minerals are found. Homes may be had for the taking.

CLIMATE.—On coast, dry season, April to November; rest of year rainy. Rainfall averages at north 96 inches; for entire section, 54 inches. Winters mild; little snow or ice. Summers

cool, with sea breezes. Temperature averages, winter, 39 deg.; summer, 61 deg.; ranges 30 deg. to 90 deg. Eastern section dry; rainfall sinks as low as 10 inches. Health fine; no malaria.

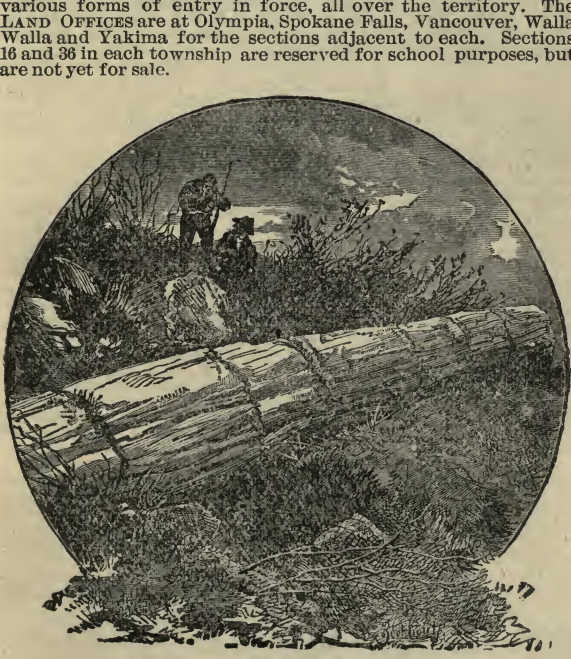
CHIEF CITIES.—Olympia, capital; Walla Walla, pop. 8 000. Seattle, pop. 8,000;

LEADING INDUSTRIES.—Agriculture, lumbering, grazing, mining, etc.

PROPERTY EXEMPT from execution: Apparel, books, pictures, keep-sakes, bed for every 2 in family, $150 in furniture, etc., 2 cows and calves, 5 swine, 2 stands bees, 25 fowls, 6 months' provision and fuel; to farmers team and utensils, $200; to mechanic or professional men, $500 in tools, etc., of calling; arms and tools $50; to draymen a team, to loggers 3 yoke oxen and $300 in implements; homestead $1,000. Assignments discharge debtor. Suits barred after 20 years for land; after 6 on written contract for rent and on judgment; after 3 for personalty or injury thereto, on verbal contract, for fraud; after 2 for libel, assault, etc. Wife's separate property exempt. She can act concerning same as if single. Arrest permitted in actions for damage, willful injury, in cases of fraud or concealment, etc., on order of court.

LIENS hold on structures, vessel, and lumber, for labor, and for material, if notice is filed in 1 and suit brought on in 12 months. Judgments hold land 5 years.

GOVERNMENT LANDS are to be found, subject to the various forms of entry in force, all over the territory. The LAND OFFICES are at Olympia, Spokane Falls, Vancouver, Walla Walla and Yakima for the sections adjacent to each. Sections 16 and 36 in each township are reserved for school purposes, but are not yet for sale.



GIANT TREES.

ENCYCLOPEDIA

OF USEFUL INFORMATION.

THE ARMY OF THE UNITED STATES.—According to the report of the Lieutenant-General, Oct., 1884, the army of the United States on the 30th of June, 1884, consisted of the following forces, in officers and men:

	Officers.	Enlisted Men.
Ten cavalry regiments	420	7,115
Five artillery regiments	279	2,596
Twenty-five infantry regiments	856	11,055
Engineer battalion, recruiting parties, ordnance department, hospital service, Indian scouts, West Point, signal detachment and general service	582	3,470
Total	2,147	24,236

For convenience, and to fix responsibility, the country is divided into three military divisions, each with several departments, as follows:

1. Military division of the Missouri, commanded by Major-General John M. Schofield, headquarters Chicago, comprehends the departments of the Missouri (Brig.-Gen. Christopher C. Augur); Texas (Brig.-Gen. David S. Stanley); Dakota (Brig.-Gen. A. H. Terry); and the Platte (Brig.-Gen. O. O. Howard). There are 8 regiments of cavalry and 20 of infantry in this division.

2. Military division of the Atlantic, commanded by Major-General Winfield S. Hancock, headquarters New York. Includes department of the East (Maj.-Gen. Hancock). This division comprises 4 regiments of artillery and 2 of infantry.

3. Military division of the Pacific, commanded by Major-General John Pope, headquarters San Francisco. Includes departments of California (Maj.-Gen. John Pope); the Columbia (Brig.-Gen. Nelson A. Miles); Arizona (Brig.-Gen. George Crook); comprises 1 regiment of artillery, 3 of cavalry and 4 of infantry.

The maximum military force allowed under existing laws is 2,155 commissioned officers and 25,000 enlisted men. The report of the lieutenant-general of the army exhibits the actual number in service as 2,147 officers and 24,236 enlisted men. The following table exhibits the number in each rank of the army:

1. Commissioned officers: Colonels, 65; lieutenant-colonels, 85; majors, 240; captains, 606; adjutants, 40; regimental quartermasters, 39; first lieutenants, 573; second lieutenants, 431; chaplains, 34; storekeepers, 14: total, 2,147.

2. The enlisted men embrace 37 sergeant-majors, 39 quartermaster sergeants, 649 musicians, 296 trumpeters, 10 saddler-sergeants, 114 ordnance-sergeants, 143 hospital stewards, 128 commissary-sergeants, 428 first sergeants, 2,147 sergeants, 1,727 corporals, 231 farriers, 98 artificers, 113 saddlers, 96 wagoners and 17,244 privates; total, 24,236. Besides these there are employed in the signal corps 491 non-commissioned officers and privates; Military Academy, 7 professors, 298 cadets, 196 enlisted men; total, 508.

The number of retired army officers is 424; number of privates discharged during the fiscal year, 1884, 6,051; number died during same period, 249; number deserted, 3,672; number enlisted and re-enlisted, 7,605.

UNITED STATES MILITARY ACADEMY at West Point was founded by act of March 16, 1802, constituting the corps of engineers of the army a military academy with fifty students or cadets, who were to receive instruction under the senior engineer officer as superintendent. Later acts established professorships of mathematics, engineering, philosophy, etc., and made the academy a military body, subject to the rules and articles of war. In 1815, a permanent superintendent was appointed, and a year later an annual board of visitors was provided for, to be named by the president, the speaker of the house, and the president of the senate. In 1843 the present system of the appointment of cadets was instituted, which assigns one cadet to each congressional district and territory in the union, to be named by the representative in congress for the time being, and ten appointments at large, specially conferred by the president of the United States. The number of students is thus limited to 312. A large proportion of those appointed fail to pass the examination, and many others to complete the course, the proportion being stated at fully one-half hitherto. The course of instruction requires four years, and is largely mathematical and professional. The discipline is very strict, even more so than in the army, and the enforcement of penalties for offences is inflexible rather than severe. The whole number of graduates from 1802 to 1877 was about 2,700, of whom 1,200 are deceased and about 1,500 living. Of those surviving, 800 are still in the army, and about 700 out of service. Appointees to the military academy must be between 17 and 22 years of age, at least five feet in height, and free from infirmity, and able to pass a careful examination in various branches of knowledge. Each cadet admitted must bind himself to serve the United States eight years from the time of admission to the academy. The pay of cadets, formerly $ 0 per month and rations, was fixed at $540 per year, with no allowance for rations, by the act of 1876. The aggregate amount of money appropriated by the United States for the military academy from 1802 to 1877, inclusive, was $11,396,128, being an average of about $149,949 annually. The number of actual members of the academy by the official register of June, 1884, was 266.

THE NAVY OF THE UNITED STATES comprises 44 naval steam vessels—all screw-propellers except 4, besides 13 wooden sailing-vessels, 19 iron-clad vessels, 2 torpedo-rams and 15 tugs; total, 93, of which comparatively few are in efficient service. The number of guns is 550.

The active list of the navy is composed of 1 admiral, 1 vice-admiral, 7 rear-admirals, 18 commodores, 43 captains, 85 commanders, 74 lieutenant-commanders, 260 lieutenants, 88 lieutenants junior grade, 191 ensigns, 97 naval cadets (who have passed the four years' academic course, and are performing two years' service at sea before final graduation), and 199 naval cadets on

probation at the Naval Academy, all of whom are officers of the line.

Of the staff there are 1 surgeon-general, 15 medical directors, 15 medical inspectors, 47 surgeons, 74 passed assistant surgeons, 8 assistant surgeons, 1 paymaster general, 13 pay directors, 13 pay inspectors, 48 paymasters, 28 passed assistant paymasters, 19 assistant paymasters, 1 engineer-in-chief, 70 chief engineers, 88 passed assistant engineers, 81 assistant engineers, 24 chaplains, 12 professors of mathematics, 1 secretary for the admiral and 1 for the vice-admiral, 1 chief constructor, 10 naval constructors, 10 assistant constructors and 10 civil engineers.

The warrant officers consist of 45 boatswains, 39 gunners, 51 carpenters, 32 sail makers and 37 mates.

The retired list is composed of officers of the line, as follows: 47 rear-admirals, 15 commodores, 12 captains, 10 commanders, 20 lieutenant-commanders, 21 lieutenants, 15 lieutenants junior grade, 8 ensigns. Staff officers, viz: 21 medical directors, 3 medical inspectors, 7 surgeons, 6 passed assistant surgeons, 6 assistant surgeons, 10 pay directors, 2 pay inspectors, 4 paymasters, 2 passed assistant paymasters, 1 assistant paymaster, 14 chief engineers, 24 passed assistant engineers, 25 assistant engineers, 3 civil engineers, 1 naval constructor, 8 chaplains and 6 professors of mathematics. Warrant officers, viz: 17 boatswains, 16 gunners, 10 carpenters and 11 sailmakers.

The active list is therefore composed of 1,064 officers of the line, 591 officers of the staff and 204 warrant officers; total, 1,859 officers of all grades.

The retired list is composed of 148 officers of the line, 137 officers of the staff, 54 warrant officers, and 6 professors of mathematics; total, 345.

There were (July, 1884) in the service, provided for by the naval appropriation act for the fiscal year, 1885, 7,500 enlisted men 750 boys.

The marine corps consists of 85 commissioned officers, 384 non-commissioned officers, 30 musicians, 96 drummers and fifers and 1,500 enlisted men; total, 2,095.

THE UNITED STATES NAVAL ACADEMY was opened October 10, 1845, and the credit of its foundation is attributed to Hon. George Bancroft, then secretary of the navy under President Polk. The course of instruction, designed to train midshipmen for the navy, at first occupied five years, of which three were passed at sea. Various changes have been made in the course of instruction, which was made seven years in 1850, four years in 1851, and six years (the last two of which are spent at sea) March 3, 1873, where it now remains. The Naval Academy, first located at Annapolis, Maryland, was removed to Newport, R. I., in May, 1861, but re-established at Annapolis in September, 1865, where it now is, occupying lands formerly known as Fort Severn. The academy is under the direct care and supervision of the navy department. There are to be allowed in the academy one naval cadet for every member or delegate to the House of Representatives, appointed at his nomination, one for the District of Columbia, and ten appointed at large by the president. The number of appointments which can be made is limited by law to twenty-five each year, named by the secretary of the navy after competitive examinations, the cadets being from 14 to 18 years of age. The successful candidates become students of the academy, and receive the pay of naval cadets—$500 per annum. Cadets who graduate are appointed in the order of merit to the lower grades of the line and engineer corps of the navy and of the marine corps as fast as vacancies occur. But such appointments cannot be made in excess of vacancies, and graduates who receive no appointments get an honorable discharge with one year's sea pay. The course of instruction is thorough, involving

a close pursuit of mathematics, steam engineering, physics, mechanics, seamanship, ordnance, history, law, etc.

NEW STANDARD TIME.—In 1884, by general agreement and partial legislation, four standard meridians were adopted within the United States, by which railway trains are run and local time regulated. These meridians are 15 degrees, or 900 miles apart, there being a difference of just one hour in time from one meridian to another, as there are 360 deg. in the earth's circumference, which divided by 24 hours gives 15 degrees to an hour. The Eastern meridian, 75 deg. W. from Greenwich, passes 4 minutes west of New York City. The Central meridian, 90 deg. W. longitude, passes through New Orleans and St. Louis. The Mountain standard meridian. 105 deg. W. longitude, passes near Pike's Peak, Rocky Mountains The Pacific meridian, 120 deg. W. longitude, is near the coast, San Francisco being 9½ minutes west of it. For places east of any meridian, one minute of time for each quarter of a degree of longitude (= 15 miles nearly), or 4 minutes for each degree, must be subtracted from the standard time to give the exact local time. For a place west of any meridian, add one minute for each quarter of a degree to the standard time. Any United States map gives the distances in longitude of most places from the several standard meridians, sufficiently near to make practical application of the rule. The standard time is used usually independent of local time.

DEPTH AND AREA SEAS AND OCEANS.

	Depth in ft.	Area in sq. miles.
Salt Lake	1,400	1,875
Lake Ladoga	1,200	12,000
Lake Superior	1,000	32,000
Lake Michigan	1,000	22,400
Lake Huron	1,000	20,000
Lake Baikal	750	12,000
Lake Tchad	350	14,000
Lake Ontario	336	6,300
Lake Nicaragua	300	6,000
Caspian Sea	250	176,000
Dead Sea	200	303
Sea of Aral	100	30,000
Mediterranean Sea	—	1,000,000
Pacific	—	78,000,000
Atlantic	—	35,000,000
Indian	—	28,000,000
Antarctic	—	8,500,000
Arctic	—	4,500,000

The greatest known depth of the ocean is midway between the islands of Tristan d'Acunha and the mouth of the Rio de La Plata. The bottom was here reached at a depth of 46,236 feet, or eight and three-fourths miles, exceeding by more than 17,000 feet the height of Mt. Everest, the loftiest mountain in the world. In the North Atlantic ocean, south of Newfoundland, soundings have been made to a depth of 4,580 fathoms, or 27,480 feet; while depths equaling 34,000 feet, or six and one-half miles, are reported south of the Bermuda Islands. The average depth of the Pacific ocean, between Japan and California, is a little over 2,000 fathoms; between Chili and the Sandwich Islands, 2,500 fathoms; and between Chili and New Zealand, 1,500 fathoms. The average depth of all the oceans is from 2,000 to 3,000 fathoms.

NOTABLE EVENTS AND DISCOVERIES.

Algerine war declared by United States, 1815, March 3.
Alien and Sedition Acts passed by Congress, 1798; expired by limitation 1801, Jan. 26.
Almanacs first printed by Purback, in Vienna, 1457.
Amendments to the constitution, 12 proposed by Congress, 1789, Sept. 25, 10 declared adopted 1791, Dec, 18.
America discovered by the Northmen A. D. 985; by Columbus, 1492, Oct. 12.
Anti-Slavery Society (American) organized at Philadelphia, 1833, Dec. 6.
Anæsthesia discovered, 1844.
Bacon's rebellion in Virginia, 1676.
Balloon ascension first made near Lyons, France, 1783.
Bank of Venice, first in Europe, 1171.
Bank of England established, 1694.
Bank of North America established, 1781.
Bank of United States, Philadelphia, 1st charter 1791, Feb. 25; 2d charter, 1816, expired 1836, March 3.
Berlin Decree by Napoleon, 1806, Nov. 21.
Berlin Congress opened 1878, June 13.
Black Hawk war with the Winnebagoes, 1832.
Boston fire, 1872, Nov. 9. Loss, $73,600,000.
Braddock's defeat at Monongahela, 1755, July 9.
Brown, John, executed at Charlestown, Va., 1859, Dec. 2.
Copyright law first passed by Congress (term 14 years), 1790, May 31.
Cotton gin invented by Eli Whitney, 1793.
Crimean war, Russia against Turkey, France and England, 1853-55.
Deposits removed from U. S. Bank by Jackson, 1833, Oct. 1.
Dorr rebellion in Rhode Island, 1842.
Dred Scott decision of U. S. Supreme Court, published, 1857, March 1.
Education, Bureau of, established 1867, March 2.
Electoral Commission Act, approved, 1877, Jan. 29.
Electric light, invented by Lodyguin and Kossloff, Russians, London, 1874.
Emancipation proclamation, 1863, Jan. 1.
Embargo Act passed by Congress, 1807, Dec. 22.
Engraving, Wood, 1423 begun; Line or Steel, 1450.
Envelopes first used for letters, 1839.
Erie, battle of Lake, Com. Perry's victory, 1813, Sept. 10.
Ether first used in surgical operations, 1844.
Express, first American, by W. F. Harnden, New York to Boston, 1821.
Fenian raids into Canada, 1866, May 31; resumed 1870, Feb. 3.
Ferries, operated by steam, first used between New York and Brooklyn, 1824.
Fillibustering raids of Wm. Walker, 1853-60.
Fire Company, Union, Philadelphia, first volunteer company in America, 1736.
Flag, American, first used by Washington at Cambridge, 1776, Jan. 1. Legally established by Congress, 1777, June 14.
France, first revolution, 1789. Reign of Terror, 1793.
Franco-German war, 1870-71.
Free-Soil Party, first national convention, Buffalo, 1848, Aug. 9.
French and Indian War in America, 1754-63.
Fugitive Slave law passed Congress, 1850, Sept. 12.

Gas, illuminating, first used, Cornwall, Eng., 1792; in U. S., Boston, 1822.
Geneva tribunal on Alabama claims, convened 1871, Dec. 15.
German Empire re-established, 1871, Jan. 18.
Ghent, treaty of, U. S. and Great Britain, 1815, Feb. 18.
Glass first used for windows in England, 674; made in Virginia, 1615; Massachusetts, 1639.
Gold first discovered in California, 1848.
Greenback Party, national platform, 1876, May 17.
Greytown, Nicaragua, bombarded by Com. Hollins, 1854, July 13.
Guadalupe Hidalgo, treaty of, U. S. and Mexico, 1848, Feb. 2.
Gunpowder used by Chinese, A.D., 80. Greek fire used by Byzantines, A.D., 668, known 400 B.C.
Harper's Ferry, Va., insurrection (John Brown), 1859, Oct. 16.
Hartford convention (anti-war), 1814, Dec. 15.
Homœopathy introduced into the U. S., 1825.
Hospital, Pennsylvania, first in America, established 1751, Feb. 7.
Hungary, rebellion in, 1848-49.
Independence, Declaration of, 1776, July 4.
Insurance, Fire, first office in America, Boston, 1724.
—— Life, first, London, 1772; first in America, Philadelphia, 1812.
—— Marine, A.D. 533; first in England about 1598; first in America, Philadelphia, 1721.
Interior, Department of, established, 1849, March 3.
Iron steamships, first, Great Britain, 1843.
Italy, war with Austria, (7 weeks' war), 1866.
Jamestown, Va., first permanent English settlement in America, founded 1607.
Jesuits, Order of, founded by Ignatius Loyola, 1541.
Judiciary Act passed by Congress, 1801, Feb. 13.
Kerosene first used for illuminating purposes, 1826
Knives, first in England, about 1550.
Know-Nothing Party (American), in New York, 1853; National platform and candidate for presidency, (M. Fillmore), 1856.
Koszta, Martin, taken from Austrian vessel by Capt. Ingraham, 1853, July 2.
Lee's surrender to Gen. Grant at Appomattox C. H., Va., 1865, April 13.
Liberty Party, national convention, Buffalo, N. Y., 1843, Aug. 30.
Library, first American, Harvard College, Cambridge, 1638.
—— first subscription, Philadelphia, 1731.
Lightning rods, first used by Benj. Franklin about 1752.
Lincoln, assassination of, 1865, April 14
London, Great fire of, 1666, Sept. 26.
—— Plague in, 1665.
Lopez captured and garroted at Havana, 1851, Aug. 16.
Louis XVI beheaded 1793. Jan. 21.
Magna Charta signed 1215.
Matches, friction, first used, 1829
Mexico, war with, declared by Congress, 1846, May 13, closed 1848, Feb. 2. City of, captured by Gen. Scott, 1847, Sept. 14. Cession of territory to U. S., 1848, Feb. 2. Cession of Gadsden purchase to the U. S., 1853, Dec. 30. War with, by France, Spain and Great Britain, 1861-63. Proclamation of Empire, under Maximilian, 1863, July 10. Republic restored, Maximilian shot, 1867, June 19.
Milan decree by Napoleon, 1807, Dec. 17.
Missouri Compromise (restricting slavery to south of 36 deg. 30 min.), passed 1820, March 3, repealed 1854, May 24.
Modoc war in California begun, 1872, Nov. 29.
Monroe doctrine declared in Pres. Monroe's message, 1823, Dec. 2.
Mormons arrive at Salt Lake Valley, Utah, 1847, July 24.
Musical notes first used, 1338; printed, 1502.

Nantes, Edict of, tolerating Protestants, 1598, April 13; Revocation of, 1685, Oct. 22.
Napoleon I declared first Consul, 1799, Nov. 10; proclaimed Emperor, 1804, May 18; abdicated after Waterloo, 1815, June 22.
Napoleon III elected President French Republic, 1848, Dec. 10. Coup d'etat dissolving Assembly, 1851, Dec. 2; proclaimed Emperor 1852, Dec. 2; deposed and Republic proclaimed, 1870, Sept. 4.
Naval Academy, U. S., at Annapolis, opened, 1845, Oct. 10.
Navigation Act, first by British Parliament, 1660.
Needles, modern, first came into use, 1545.
Netherlands, revolt of, 1565–80
Newspaper, first authentic, 1494; first daily, Frankfort *Gazette*, 1615; first in England, *Weekly Newes*, 1622; first French, *Gazette de France*, Paris, 1631; first attempt at parliamentary reporting, 1641; first advertisement appeared in 1648; first American, "Publick Occurrences, Foreign and Domestick," Boston, 1690, Sept. 25; first English daily, London, *Daily Courant*, 1702; first continuously printed in America, *Boston News Letter*, 1702; first daily in United States, *The Pennsylvania Packet*, 1784.
Omnibuses first used in New York, 1830.
Orders in Council, British, issued 1807, Jan. 7.
Ordinance of 1787, passed by Continental Congress, 1787, Sept 15.
Organs, first authentic use of, 755; in England, 951.
Ostend Manifesto, as to Cuba, by Pierre Soulé, James Buchanan and J. Y. Mason, 1854, Oct. 21.
Paper made by Chinese, from silk, 120, B.C.; from vegetable fiber, A.D., 651; from cotton, A.D., 711; from rags, 1085.
Paris, treaty of, ceding French American possessions to Great Britain, 1763, Feb. 10; second treaty of, closing Crimean war, 1856, March 30.
Patent right law, first enacted in U. S., 1790, April 15.
Peace conference convened at Washington, 1861, Feb. 4.
Pencils, leaden styles used, A.D., 50; modern, used in England, 1565.
Pens, steel, first made, 1803; gold, first used about 1825.
Phonograph invented by T. A. Edison, 1877.
Photographs first produced in England, 1802, perfected, 1841.
Piano-forte invented in Italy, about 1710.
Pilgrims, landing at Plymouth, Mass., 1620, Dec. 21 (commonly called Dec. 22).
Pins used in England about 1450; in America, machine-made, 1832.
Pontiac's conspiracy to unite Indians against the English, 1762.
Postoffice first established, between Vienna and Brussels, 1516.
Postage stamps first used in England, 1840; in the United States, 1847.
Printing; clay tablets used by Assyrians and Babylonians, B.C; Wooden blocks used by Chinese, A.D., 952. Block books; Biblia Pauperum, 1420; movable types, L. Coster, of Haarlem, 1423; J. Gutenberg, of Mentz, 1438; First Bible, Faust & Schœffer, 1456; first book printed with date, Latin Psalter, Faust & Schœffer, 1457; first book in English, "History of Troy," printed at Cologne, by William Caxton, 1471; first book printed in England with date, Caxton's "Game and Playe of the Chesse," 1474; first in America, Escala, Espiritual of Chimaco, printed by Juan Hablas, Mexico, 1535; first press in the United States, at Cambridge, Mass., Stephen Daye, 1639.
Pyramids first erected, 2240 B.C.
Railroad, Passenger, first opened in England, 1825, Sept. 27; freight, first in the United States, Crum Creek quarries to Ridley Creek in Pennsylvania. Passenger, first in America, Baltimore and Ohio 1828. Steam, first in New York state, Albany to Schenectady, 16 miles, 1830.
Reformation in Germany, 1517; in England, 1532.
Republican Party, first convention, Pittsburgh, Pa., 1856, Feb. 22.

Resumption of specie payments in U. S., act approved, 1875, Jan. 14; took effect 1879, Jan. 1.
Revolutionary war, beginning, battle of Lexington, 1775, April 19; end of last battle, Combahee, 1782, Aug. 27; preliminary treaty of peace, 1782, Nov. 30.
Richmond, Va., evacuated by Confederates, 1865, April 3.
Russia, Serf Emancipation in, 1861.
Saint Bartholomew, massacre of, 1572, Aug. 24.
San Juan boundary decided in favor of the U. S., 1872, Oct. 21.
Savannah, first steamer crossed the Atlantic, 25 days, Savannah to Liverpool, 1819, May 24.
Seminole war, first in Georgia and Florida, 1817-18; in Florida, 1835-42.
Sewing Machine first patented, England, 1755; first complete, E. Howe (American), 1846.
Shay's Rebellion in Massachusetts, 1786-87.
Shiloh, Tenn. (or Pittsburgh Landing), battle of, 1862, April 6-7.
Sioux war in Minnesota, 1862-63.
Sleeping cars first used, 1858; Pullman's patent, 1864.
Smith, Joseph, Mormon leader, killed at Carthage, Ill., 1844, June 27.
Stamp Act enacted; 1765, March 22; repealed, 1766, March 19.
Statutes of the United States, first revised and codified, 1873.
Steam Engine, boiler, discovered by Marquis of Worcester, 1663. Newcomen's engine patented, 1705; perfected by James Watt, 1773; high pressure engine invented by Oliver Evans (American), 1779.
Steam vessels, Papin, France, 1707; Jonathan Hulls, England, 1736; William Henry, Conestoga River, Pa., 1763; James Rumsey, Md., 1786; John Fitch, Delaware River, 1786; Robert Fulton, New York to Albany, 1807.
Sumter, Fort, captured by Confederates, 1861, April 14.
Sunday Schools, first established by Robert Raikes, Gloucester, England, 1781.
Telegraph, first electric, Paddington to Drayton, England, 1835; Morse's, invented, 1835; first in operation in America, Washington to Baltimore, 1844, May 27; submarine cable, first laid between Dover and Calais, 1851; first Atlantic cable operated, 1858.
Telephone (speaking), A. Graham Bell, first presented Philadelphia Centennial Exhibition, 1876; practically successful as a telegraph, 1877, May 14.
Telescope, invented, 1608.
Theatre, first in America, Williamsburg, Virginia, 1752.
Thirty Years' War in Germany, 1618-1648.
Tobacco introduced into England from Virginia, 1583.
Tripoli war with the United States, 1803-'5.
Turner, Nat. slave insurection in Virginia, 1831, Aug.
Union of England and Scotland, 1707; Great Britain and Ireland, 1800.
Utrecht, treaty of, 1713, April 11.
Vaccination, discovered by Dr. Jenner, England, 1796.
War of 1812 with Great Britain declared by proclamation, 1812, June 19; ended by Treaty of Ghent, 1815, Feb. 18.
Washington inaugurated first president, 1789, April 30.
Washington, Treaty of, with Great Britain, war claims, 1871, June 17.
Watches first made in Nuremburg, 1477.
Waterloo, battle of, 1815, June 18.
Whisky insurrection in Pennsylvania, 1791-94.
Wilmot Proviso, restricting slavery, offered in House of Representatives, by David Wilmot, of Pennsylvania, 1846, Aug. 8.
Yellowstone National Park, act of congress, 1871, Feb. 28.
Yorktown, surrender of Cornwallis to Washington, 1781, Oct. 19.

THE THREE WISE MEN, or Magi, who brought gifts to the infant Christ, were Melchior, offering gold; Jasper, bringing frankincense, and Balthazar, who brought myrrh.

OCCUPATION OF THE PEOPLE OF THE UNITED STATES.—The following list shows the number engaged in each general calling in the United States: Agriculture and kindred pursuits, 8,340,000; professions and personal service, 4,500,000; manufacturing and mining, 4,100,000; trade and transportation, 2,000,000.

WEDDING ANNIVERSARIES.

First anniversary	Cotton wedding.
Second anniversary	Paper wedding.
Third anniversary	Leather wedding.
Fifth anniversary	Wooden wedding.
Seventh anniversary	Woolen wedding.
Tenth anniversary	Tin wedding.
Twelfth anniversary	Silk and fine linen wedding.
Fifteenth anniversary	Crystal wedding.
Twentieth anniversary	China wedding.
Twenty-fifth anniversary	Silver wedding.
Thirtieth anniversary	Pearl wedding.
Fortieth anniversary	Ruby wedding.
Fiftieth anniversary	Golden wedding.
Seventy-fifth anniversary	Diamond wedding.

TUNNELS OF THE WORLD.—Mount St. Gothard, 48,840 feet long (the longest in the world); Mount Cenis, 39,840 feet long; Hoosac, 25,080 feet long; Nochistongo, 21,659 feet long; Sutro, 21,120 feet long; Riquivel, 18,623 feet long; Nerthe, 15,153 feet long; Blaizy, 13,455 feet long; Thames and Medway, 11,880 feet long.

GARDEN OF THE GODS, COLORADO.

THE BIGGEST THINGS ON EARTH.

THE HIGHEST RANGE OF MOUNTAINS is the Himalaya, the mean elevation being estimated at from 16,000 to 18,000 feet. The loftiest mountain is Mountain Everest or Guarisanker, of the Himalayas range, having an elevation of 29,002 feet above the sea level.

THE LARGEST CITY in the world is London. Its population numbers 3,030,871 souls. New York, with a population of 1,250,000, comes fifth in the list of great cities.

THE LARGEST THEATER is the new Opera House in Paris. It covers nearly three acres of ground. Its cubic mass is 4,287,000 feet. It cost about 1 0,0 0,000 francs.

THE LARGEST SUSPENSION BRIDGE is the one between New York city and Brooklyn. The length of the main span is 1,595 feet, 6 inches; the entire length of the bridge is is 5,980 feet.

THE LOFTIEST ACTIVE VOLCANO is Popocatapetl—"smoking mountain"—thirty-five miles southwest of Pueblo, Mexico. It is 17,784 feet above the sea-level, and has a crater three miles in circumference and a thousand feet deep.

THE LARGEST ISLAND in the world, which is also regarded as a continent, is Australia. It is 2,500 miles in length from east to west, and 1,850 miles from north to south. Its area is 2,984,287 square miles.

THE LONGEST SPAN OF WIRE in the world is used for a telegraph in India, over the river Kistnah, between Bazorah and Sectynagrum. It is more than 6,000 feet in length, and is 1,200 feet high.

THE LARGEST SHIP in the world is the Great Eastern. She is 680 feet long, 83 feet broad and 60 feet deep, being 28,627 tons burden, 18,915 gross, and 13,344 net register. She was built at Millwall on the Thames, and was launched January 31, 1857.

THE LARGEST UNIVERSITY is Oxford, in England, in the city of the same name, 55 miles from London. It consists of 21 colleges and five halls. Oxford was a seat of learning as early as the time of Edward the Confessor. University College claims to have been founded by Alfred.

THE LARGEST BODY OF FRESH WATER on the globe is Lake Superior, 400 miles long, 160 wide at its greatest breadth, and having an area of 32,000 square miles. Its mean depth is 900 feet and its greatest depth is said to be about 206 fathoms. Its surface is about 635 feet above the level of the sea.

THE BIGGEST CAVERN is the Mammoth Cave in Edmonson County, Ky. It is near Green River, about 6 miles from Cave City and 28 from Bowling Green. The cave consists of a succession of irregular chambers, some of which are large, situated on different levels. Some of these are traversed by navigable branches of the subterranean Echo river. Blind fish are found in its waters.

THE LONGEST TUNNEL in the world is that of the St. Gothard, on the line of railroad between Lucerne and Milan. The summit of the tunnel is 900 feet below the surface at Andermatt, and 6,600 feet beneath the peak of Kastelhorn of the St. Gothard group. The tunnel is 26½ feet wide and is 18 feet and 10 inches from the floor to the crown of the arched roof. It is 9½ miles long, 1¾ miles longer than the Mt. Cenis tunnel.

THE BIGGEST TREES in the world are the mammoth trees of California. One of a grove in Tulare county, according to measurements made by members of the state geological survey, was shown to be 276 feet in height, 108 feet in circumfererence at

the base, and 76 feet at a point 12 feet above ground. Some of the trees are 376 feet high and 34 feet in diameter. Some of the largest that have been felled indicate an age of from 2,000 to 2,500 years.

THE LARGEST LIBRARY is the Bibliotheque National in Paris, founded by Louis XIV. It contains 1,400,000 volumes, 300,000 pamplets, 175,000 manuscripts, 300,000 maps and charts, 150,000 coins and medals. The collection of engravings exceeds 1,300,000, contained in some 10,000 volumes. The portraits number about 100,000. The building which contains these treasures is situated on the Rue Richelieu. Its length is 540 feet, its breadth 130 feet. The largest library in New York is, in respect of separate works, the Astor. About 190,000 volumes are on its shelves.

THE LARGEST DESERT is that of Sahara, a vast region of northern Africa, extending from the Atlantic Ocean on the west to the valley of the Nile on the east. The length from east to west is about 3,000 miles, its average breadth about 900 miles, its area 2,000,000 square miles. Rain falls in torrents in the Sahara at intervals of five, ten and twenty years. In summer the heat during the day is excessive, but the nights are often cold. In winter the temperature is sometimes below freezing point.

THE GREATEST PYRAMID is that of Cheops, one of the three pyramids forming the Memphis group, situated on a plateau about 137 feet above the level of the highest rise in the Nile. Its dimensions have been reduced by the removal of the outer portions to furnish stone for the city of Cairo. Its masonry consisted originally of 89,028,000 cubic feet, and still amounts to 82,111,000 feet. The present vertical height is 450 feet, against 479 originally. The total weight of the stone is estimated at 6,316,000 tons.

THE GREATEST FORTRESS from a strategical point of view is the famous stronghold of Gibraltar, belonging to Great Britain, situated upon the most southern point of land upon the coast of southwestern Spain. It occupies a rocky peninsula, jutting out into the sea, about three miles long and three-quarters of a mile wide. One central rock rises to a height of 1,435 feet above the sea level. Its northern face is almost perpendicular, while its east side is full of tremendous precipices. On the south it terminates in what is called Europa point. The west side is less steep than the east, and between its base and the sea is the narrow, almost level span on which the town of Gibraltar is built. The fortress is considered impregnable to military assault. The regular garrison in time of peace numbers about 7,000.

THE LARGEST INLAND SEA is the Caspian, lying between Europe and Asia. Its greatest length is 760 miles and its area 180,000 square miles. Great Salt Lake, in Utah, which may properly be termed an inland sea, is about 90 miles long and has a varying breadth of from 20 to 25 miles. Its surface is 4,200 feet above the level of the sea, whereas the surface of the Caspian is 84 feet below the ocean level.

THE LARGEST EMPIRE in the world is that of Great Britain, comprising 8,557,558 square miles, more than a sixth part of the land of the globe, and embracing under its rule nearly a sixth part of the population of the world. In territorial extent the United States ranks third, containing 3,580,242 square miles, including Alaska; in population it ranks fourth with its 50,000,000 of people. Russia ranks second, having 8,351,940 square miles.

THE HIGHEST MONOLITH is the obelisk at Karnak, in Egypt. Karnak is on the east bank of the Nile, near Luxor, and occupies a part of the site of ancient Thebes. The obelisk is ascribed to Hatasu, sister of Pharaoh Thothmes III, who reigned about 1600 B.C. The whole length is 122 feet, its weight 400 tons. Its height, without pedestal, is 108 feet 10 inches. The height of the obelisk in Central Park, without pedestal, is 68 feet 11 inches, its weight about 168 tons.

THE LARGEST BELL in the world is the great bell of Moscow, at the foot of the Kremlin. Its circumference at the

bottom is nearly 68 feet, and its height more than 21 feet. In its stoutest part it is 23 inches thick, and its weight has been computed to be 443,722 pounds. It has never been hung, and was probably cast on the spot where it now stands. A piece of the bell is broken off. The fracture is supposed to have been occasioned by water having been thrown upon it when heated by the building erected over it being on fire.

FAMOUS BRIDGES.—The largest bridge ever built (without mentioning trestleworks) was the Tay bridge, 10,320 feet in length; the largest bridge now in use is the Montreal bridge over the St. Lawrence, 8,791 feet; probably the longest bridge that will be built in a century from now is the Forth bridge, to be 9,200 feet long; the highest bridge in the world is at Gerabit, France, crossing the river at the height of 413 feet; the most wonderful bridge in the world is the Brooklyn bridge, the permanent weight being 14,680 tons; the bridge of saddest reflections is the Bridge of Sighs at Venice, Italy; probably the bridge most celebrated in song and story, is the London bridge.

NAMES OF DAYS.

Sunday (Saxon Sunnandæg, day of the sun).
Monday (German, Montag, day of the moon).
Tuesday (Anglo-Saxon Tiwesdæg, from Tiw, the god of war).
Wednesday (Anglo-Saxon, Wodensdæg, from Odin or Woden, the god of storms and boundaries).
Thursday (Danish, Thor, the god of thunder).
Friday (Saxon, Frigedæg, day of Freya, goddess of marriage, fecundity and fidelity).
Saturday (day of Saturn, the god of time.)

The names of the seven days of the week originated with the Egyptian astronomers. They gave them the names of the sun, moon and five planets; viz., Mars, Mercury, Jupiter, Venus and Saturn.

The Chinese and Thibetans have a week of five days, named after iron, wood, water, feathers and earth.

ORIGIN OF NAMES OF MONTHS.

January.—The Roman Janus presided over the beginning of everything; hence the first month of the year was called after him.

February.—The Roman festival Februs was held on the 15th day of this month, in honor of Lupercus, the god of fertility.

March.—Named from the Roman god of war, Mars.

April.—Lat. Aprilis, probably derived from aperire, to open; because spring generally begins and the buds open in this month.

May.—Lat. Maius, probably derived from Maia, a feminine divinity worshiped at Rome on the first day of this month.

June.—Juno, a Roman divinity worshiped as the Queen of Heaven.

July (Julius).—Cæsar was born in this month.

August.—Named by the Emperor Augustus Cæsar, B.C. 30, for himself, in memory of several victories gained during this month.

September (septem, or 7).—September was the seventh month in the old Roman calendar.

October (octo, meaning 8).—Eighth month of the old Roman year.

November (novem, or 9)—November was the ninth month in the old Roman year.

December (decem, or 10).—December was the tenth month of the early Roman year.

LEXICON

OF

MYTHOLOGIES AND CLASSICS.

Acheron, a river of Hades.
Achilles, bravest of the Greeks in the war against Troy, invulnerable except in his right heel.
Actæon, a famous hunter, changed by Diana into a stag, and killed by his own dogs.
Adonis, a beautiful youth beloved by Venus.
Ægeus, a king of Athens who threw himself into the sea, called in consequence the Ægean Sea.
Æneas, son of Anchises and Venus, the hero of Virgil's Æneid.
Æolus, god of wind and storm.
Æsculapius, son of Apollo, god of medicine.
Agamemnon, commander of Grecian forces in siege of Troy.
Ajax, a Grecian hero in Trojan war.
Ammon, a title of Jupiter.
Amphion, a king of Thebes, who built the city by playing on a lyre.
Amphitrite, the wife of Neptune, and goddess of the sea.
Andromache, wife of Hector of Troy.
Andromeda, daughter of Cepheus, rescued from a sea-monster and married by Perseus.
Antæus, a giant overcome by Hercules.
Aphrodite, goddess of love and beauty.
Apis, the sacred bull of the Egyptians worshiped as a god.
Apollo, god of poetry, song, music and the arts.
Argonauts, companions of Jason, on the Argo, in search of the golden fleece.
Argus, the keeper with a hundred eyes, who was to guard Io. After his death, Juno turned him into a peacock, putting his eyes on the bird's tail.
Ariadne, daughter of Minos, king of Crete, wife of Bacchus.
Arion, a Greek bard, who, when cast into the sea by robbers, was saved by a dolphin, who was charmed with his music.
Astræa, goddess of justice.
Atlanta, Bœotian maiden very swift of foot.
Ate, goddess of mischief.
Atlas, leader of the Titans, carried the world on his head and hands.
Atropos, one of the Fates.
Aurora, the goddess of morning.
Avernus, lake of the lower world.
Bacchus, god of wine.
Bellerophon, rider of the winged horse Pegasus.
Bellona, goddess of war.
Bucephalus, Alexander the Great's horse.
Cadmos, a Phœnician, inventor of the alphabet.
Calliope, the muse of epic poetry.
Cassandra, daughter of Priam, king of Troy.
Castor and Pollux, twin brothers, who, from their love for each other, were placed as a constellation in heaven under the name of Gemini, "the twins."
Centaur, half man, half horse.
Cerberus, the three-headed dog of Pluto that guarded the entrance to hell.
Ceres, the goddess of agriculture, grain, fruits and corn.
Charon, ferryman over the Styx.
Charybdis, a whirlpool between Italy and Sicily.
Chimæra, a monster who vomited fire.

Chloris, goddess of flowers.
Circe, a famous sorceress.
Clio, muse of history.
Clotho, youngest of the Fates.
Comus, god of mirth and joy.
Cupid, god of love.
Cynthia, Diana.
Cytherea, Venus.
Dædalus, a sculptor and architect.
Damon and Pythias, models of friendship in the face of death.
Daphne, a nymph beloved by Apollo.
Delphi, a town in Phocis, celebrated for its oracle of Apollo.
Deucalion, a king of Thessaly.
Diana, sister of Apollo, goddess of the moon and of hunting.
Dido, foundress of Carthage. Fell in love with Æneas, but not finding her love returned, killed herself.
Dryads, wood nymphs.
Echo, a nymph who pined for Narcissus, until nothing was left but her voice.
Elysium, heaven.
Endymion, a youth celebrated for his beauty, and for the perpetual sleep in which he lay.
Erebus, god of darkness.
Eurydice, wife of Orpheus.
Euterpe, muse of lyric poetry and music.
Fates, Clotho, Lachesis, and Atropos, who determined the birth, life and death of mortals.
Faunis, god of agriculture.
Flora, goddess of flowers.
Furies, Alecto, Megæra and Tisiphone.
Ganymede, cupbearer of the gods.
Gordius, the king of Phrygia, who tied the inextricable knot, which Alexander the Great cut with his sword.
Gorgons, Medusa, Euryale and Sthenio, three female monsters, who turned all they looked upon into stone.
Graces, Aglaia, Thalia and Euphrosyne, attendants of Venus.
Harpies, women with wings and claws.
Hebe, the goddess of youth, daughter of Juno, and wife of Hercules.
Hecate, goddess of enchantments.
Hector, son of Priam, slain by Achilles.
Hecuba, mother of Hector.
Helena, the beautiful wife of Menelaus, king of Sparta.
Helle, a maiden drowned in the strait, which after her is called Hellespont.
Hercules, god of strength, son of Jupiter and Alcmena.
Hermes, Mercury.
Hero, priestess of Venus, beloved by Leander, who used to swim the Hellespont to meet her.
Hesperus, son of Atlas, turned into a star.
Horæ, the hours, daughters of Jupiter.
Hyacinthus, a beautiful lad, accidentaly killed by Apollo, and from his blood sprang the flower that bears his name.
Hydra, a water serpent with fifty heads, killed by Hercules.
Hygeia, goddess of health, daughter of Æsculapius.
Hymen, god of marriage.
Hyperion, father of the sun, son of Titan and the earth.
Iachus, Bacchus, god of mirth and drinking.
Icarus, son of Dædalus. Fleeing from Crete, his father attached wings made of wax to his body. The wax melted on his soaring too near the sun, and he fell into the sea.
Io, daughter of Inachus, king of Argos, beloved by Jove.
Iris, the swift-footed messenger of the gods.
Isis, Egyptian goddess, confounded with the sun.
Janus, god of the sun, having two faces.
Jason, leader of the Argonauts, who brought the golden fleece from Colchis.

Juno, daughter of Saturn, sister and wife of Jupiter.
Jupiter, chief among the gods, called also Jove.
Laocoon, a Trojan priest of Apollo, who with his two sons was crushed by serpents.
Lares, deities who preside over the home.
Latona, mother of Apollo and Diana.
Laverna, goddess of thieves.
Leander, a Greek youth, who swam the Hellespont every night to visit Hero, until he was drowned in a storm.
Lethe, a river of Hades, whose waters, when drunk, caused forgetfulness.
Mars, god of war, son of Jupiter and Juno.
Medea, Grecian princess, who assisted Jason to obtain the golden fleece, and then became his wife.
Medusa, one of the Gorgons, killed by Perseus.
Melpomene, the muse of tragic and lyric poetry.
Mentor, the wise friend of Ulysses.
Mercury, god of commerce and grain.
Midas, a Phrygian king who desired of Bacchus that everything he touched might turn into gold; his request being granted, even his food turned to gold, but he was saved by washing in the river Pactolus.
Minerva, goddess of wisdom.
Momus, god of mockery and censure.
Morpheus, god of dreams and sleep.
Muses, daughters of Jupiter and Mnemosyne. They were Calliope, muse of epic poetry; Clio, of history; Erato, of amatory poetry; Thalia, of comedy; Melpomene, of tragedy; Terpsichore, of dancing; Euterpe, of lyric poetry; Polyhymnia, of poetry and eloquence; and Urania, of astronomy.
Naiads, nymphs of waters.
Narcissus, a beautiful youth, who fell in love with his own image reflected in a well, and pined away until he was changed into a flower called by his name.
Nemesis, goddess of justice and punishment.
Neptune, god of the sea, and brother of Jupiter.
Nereids, sea nymphs.
Nestor, a king of Pylos, famous for his eloquence and wisdom.
Niobe, daughter of Amphion, king of Thebes. Her children having been killed, she wept for them until she turned into stone.
Nox, goddess of darkness.
Œdipus, king of Thebes, who solved the riddle of the Sphinx.
Olympus, a lofty mountain on the borders of Thessaly, the seat of the gods.
Ops, goddess of plenty and patroness of husbandry.
Oreads, mountaid nymphs.
Orestes, son of Agamemnon, who avenged his father's murder by slaying his guilty mother.
Orion, a celebrated giant and hunter.
Orpheus, a poet who moved inanimate objects by the music of his lyre and charmed wild beasts.
Osiris, the chief Egyptian deity.
Pactolus, a river in Lydia, said to bring down golden sands, from Midas having washed in it.
Pæan, Apollo as the healing deity.
Pallas, Minerva.
Pan, son of Mercury, chief god of woods, shepherds, fishing, etc.
Pandora, a woman made by Vulcan. She was presented with gifts by all the gods. She opened a box she had received from Jupiter, and out of it flew all manner of diseases.
Parcæ, the Fates.
Paris, son of Priam, who carried off Helen, and so occasioned the Trojan war, in which he was slain.
Parnassus, a mountain in Greece sacred to Apollo and the muses.
Pegasus, a winged horse of the muses.

Penates, household gods.
Penelope, the wife of Ulysses.
Perseus, a son of Jupiter, who cut off the head of Medusa, and thus saved Andromeda, whom he married.
Phaeton, a son of Sol, who obtained leave to drive a chariot of the sun for one day, and upset it.
Phlegethon, a river of fire in the lower world.
Phœbe, goddess of the moon, sister of Phœbus.
Phœbus, Apollo, god of the sun.
Phœnix, a fabulous bird, which at death burned itself to ashes, from which a new phœnix arose.
Phosphorus, Lucifer, the morning star Venus.
Pluto, king of the lower world.
Plutus, god of riches.
Polyhymnia, muse of lyric poetry and eloquence.
Pomona, goddess of fruit.
Poseidon, Greek god of the sea, the Roman Neptune.
Priam, last King of Troy, slain by Pyrrhus, the son of Achilles.
Priapus, god of fruitfulness and vineyards.
Prometheus, said to have made a man of clay, and put life into him by fire stolen from heaven. Jupiter chained him to Mt. Caucasus, where a vulture fed continually on his liver.
Proserpine, wife of Pluto and queen of the lower regions.
Proteus, a sea-god and prophet; he could assume any form.
Pthah, great Egyptian god.
Psyche, a nymph beloved by Cupid.
Pygmies, a nation of dwarfs in Africa, only a span high.
Pygmalion, a king of Cyprus, who fell in love with the image of a maiden which he made. Venus changed it into a woman, whom he married.
Pyramus, lover of Thisbe.
Python, a serpent killed by Apollo near Delphi.
Rhadamanthus, one of the judges in the lower world.
Romulus, founder of Rome.
Saturn, father of Jupiter, by whom he was dethroned.
Satyrs, lascivious sylvan deities.
Scylla, a rock between Italy and Sicily, opposite Charybdis. On this rock lived Scylla, a fearful monster, which barked like a dog, and had six mouths and twelve feet.
Serapis, an Egyptian divinity.
Sinon, the Greek who persuaded the Trojans to admit the wooden horse filled with Greek warriors.
Sirens, sea nymphs, who, on the coast of Italy, enticed mariners ashore by sweet voices, and killed them.
Sisyphus, a wicked king of Corinth, who was compelled by Pluto to roll to the top of a hill a stone which continually fell back again.
Styx, a river of Hell, across which the spirits were ferried by Charon.
Tantalus, son of Jupiter, who, offending his father, was made to stand up to his chin in water, with fruit hung over his head; the water receded when he wished to drink, and the fruit eluded him when he was hungry.
Tartarus, the lower world.
Telemachus, son of Ulysses and Penelope.
Terpsichore, muse of dancing.
Thalia, muse of comedy.
Themis, goddess of justice.
Theseus, a king of Athens.
Thespis, founder of Greek tragedy.
Thetis, mother of Achilles.
Timon, celebrated misanthrope of Athens.
Timotheus, a celebrated musician of Miletus.
Titans, giant sons of Titan, who helped their father contend against Jupiter; they were overthrown by his bolts.
Troy, a city of Asia Minor, destroyed by the Greeks after ten years' siege.

Ulysses, a king of Ithaca, famed among the Greek warriors before Troy for his craft and eloquence.
Urania, muse of astronomy.
Venus, goddess of love, beauty and pleasure.
Vertumnus, god of the seasons.
Vesper, the star Hesperus.
Vesta, daughter of Saturn, goddess of the household fires and domestic life
Vulcan, god of fire, son of Jupiter and Juno.
Zephyrus, the west wind.
Zeus, Jupiter.

HEIGHT OF CHIEF MONUMENTS AND SPIRES of the world are as follows: Washington Monument, United States, 550 feet; Cathedral of Cologne, Germany, 511 feet; Cathedral of St. Stephen, Vienna, Austria, 476 feet; Cathedral of Strasburg, Germany, 468 feet; Cathedral of St. Peter's, Rome, Italy, 448 feet; Great Pyramid, Egypt, 450 feet; King Shafra's Pyramid, Egypt, 447 feet; Church of Notre Dame, Antwerp, Belgium, 430 feet; Cathedral of Amiens, France, 422 feet; Torazzo's Tower, Italy, 396 feet; Cathedral of Florence, Italy. 387 feet; St. Paul's Cathedral, London, England, 362 feet; Hotel de Ville, Brussels, Belgium, 358 feet; Cathedral of Milan, Italy, 355 feet; St. Patrick's Cathedral, New York, United States, 344 feet; Giralda's Tower, Italy, 350 feet; Bartholdi's Statue, United States, 324 feet; Cathedral of Bremen, Germany, 324 feet; St. Mark's, Venice, 328 feet; Asimelli Tower, Italy, 321 feet; Cathedral of Norwich, England, 315 feet; Board of Trade, Chicago, 303 feet; Lincoln Cathedral, England, 300 feet; Bunker Hill Monument, United States, 221 feet; Leaning Tower, Italy, 174 feet.

THE LARGEST TELESCOPE in the world is the Lord Rosse, which has an aperture of 72 inches. The largest in this country is at San Jose, Cal., having an aperture of 28 inches.

LARGEST ELECTRIC LIGHT in the world was in 1883 at the Sydney lighthouse, Australia, which has a power of 180,000 candles, and the fourth largest is at San Jose, Cal., 24,000 candle power (the light at Paris, in Palais d' Industrie, equal to 150,000 candle power, and the Marseilles light of 40,000 candles, being greater). The Sydney light is visible 50 miles; that of San Jose sheds light two miles around. Since 1883 numerous lights equaling these have been put in operation. Paris, France, is to have one of enormous power.

NOMS DE PLUME.

Agate	Whitelaw Reid.
A. L. O. E. (A lady of England)	Charlotte Tucker.
Artemas Ward	Charles F. Browne.
Boz	Charles Dickens.
Bret Harte	F. B. Harte.
Buffalo Bill	W. F. Cody.
Carleton	C. C. Coffin.
Danbury News Man	J. M. Bailey.
Diedrich Knickerbocker	Washington Irving.
Elia	Charles Lamb.
Eli Perkins	M. G. Langdon.
Fanny Fern	Mrs. Sarah P. W. Parton.
Fat Contributor	A. M. Griswold.
Gail Hamilton	Mary Abigail Dodge.
Gath	George Alfred Townsend.
Geoffrey Crayon	Washington Irving.
George Eliot	Mrs. M. C. E. Lewes-Cross.
Grace Greenwood	Mrs. Lippincott.
Harry Castlemon	Charles Fosdick.
H. H. (Helen Hunt)	Mrs. Helen Jackson.
Hugh Conway	F. J. Fargus.
Ik. Marvel	Donald G. Mitchell.
Jean Paul	Jean Paul Frederick Richter.
Joaquin Miller	C. H. Miller.
Josh Billings	Henry W. Shaw.
Joshua Coffin	H. W. Longfellow.
Lemuel Gulliver	Jonathan Swift.
Mark Twain	Samuel L. Clemens.
Marion Harland	Mrs. M. V. Terhune.
M. Quad	C. B. Lewis.
Max Adeler	Charles H. Clarke.
Mrs. Partington	B. P. Shillaber.
Oliver Optic	W. T. Adams.
One of the Fools	A. W. Tourgee.
Ouida	Louisa de la Rame.
Owen Meredith	Lord Lytton.
Peter Parley	S. C. Goodrich.
Peter Parley	Wm. Martin.
Petroleum V. Nasby	D. R. Locke.
Poor Richard	Benjamin Franklin.
Porte Crayon	D. H. Strother.
Robinson Crusoe	Daniel Defoe.
Rob Roy	John Macgregor.
Sam Slick	J. C. Haliburton.
Sophia May	Miss R. S. Clarke.
Saxe Holm	Ruth Ellis.
Timothy Titcomb	J. G. Holland.
Tom Brown	Thomas Hughes.

DERIVATION OF THE ENGLISH LANGUAGE.—Over ¾ of the words in the English language are derived from the Latin, over ¼ from the French, about one-tenth from the Saxon, and a little less from the Greek.

SEVEN WONDERS OF THE WORLD.—The pyramids of Egypt. Pharos of Alexandria. Walls and hanging gardens of Babylon. Temple of Diana at Ephesus. The statue of the Olympian Jupiter. Mausoleum of Artemisia. Colossus of Rhodes.

THE SEVEN WISE MEN OF GREECE.—Flourished in Greece in the sixth century, B.C. There names were: Solon, Chilo, Pittacus, Bias, Periander, Cleobulus and Thales.

THE SEVEN SLEEPERS.—Were, according to an early legend, seven noble youths of Ephesus, who fled from persecution to a cavern, where they were discovered and walled in to starve to death. They were made to sleep, and in that state lived two centuries. There names are said to have been: Maximian, Malchus, Martinian, Denis, John, Serapion and Constantine.

THE SEVEN HILLS OF ROME.—Rome was built upon the Aventine, Capitoline, Cœlian, Esquiline, Palatine, Quirinal and Viminal hills. Their altitude above the Tiber is only about 150 feet.

FOOD.—The time required to digest the various kinds of food will be found below:

	Hrs.	Min		Hrs.	Min.
Rice, boiled	1	..	Eggs, soft boiled	3	..
Eggs, whipped	1	30	Beefsteak, broiled	3	..
Trout, fresh, fried	1	30	Mutton, broiled	3	..
Soup, barley, boiled	1	30	Mutton, boiled	3	..
Apples, sweet, raw	1	30	Soup, bean, boiled	3	..
Venison steak, broiled	1	45	Chicken soup, boiled	3	..
Sago, boiled	1	45	Pork, salt, broiled	3	15
Tapioca, boiled	2	..	Mutton, roasted	3	15
Barley, boiled	2	20	Bread, corn, baked	3	15
Milk, boiled	2	..	Carrot, boiled	3	20
Liver, beef, broiled	2	..	Sausage, broiled	3	20
Eggs, fresh, raw	2	..	Oysters, stewed	3	30
Apples, sour, raw	2	..	Butter	3	30
Cabbage, raw	2	15	Cheese, old	3	30
Milk	2	15	Bread, fresh, baked	3	30
Eggs, roasted	2	15	Turnips, flat, boiled	3	30
Goose, roasted	2	15	Potatoes, Irish, boiled	3	30
Turkey, roasted	2	30	Eggs, hard boiled	3	30
Cake, sponge, baked	2	30	Green corn, boiled	3	35
Hash, warmed	2	30	Beans and beets, boiled	3	45
Beans, pod, boiled		30	Salmon, salted, boiled	4	..
Parsnips, boiled	2	30	Veal, fresh, fried	4	30
Potatoes, Irish, baked	2	30	Cabbage, boiled	4	45
Custard, baked	2	50	Suet, boiled	5	30
Oysters, raw	2	45			

VALUE OF A TON OF GOLD AND SILVER.—A ton of pure gold is worth $602,798.90, and $1,000,000 in gold coin weighs 3,686 lbs. A ton of pure silver is worth $37,705, and $1,000,000 in silver coin weighs 58,921 lbs.

ROOSTER IN POLITICS was first used by the press to head the announcement of political victories at the election of 1844, when the Democrats "crowed" over the defeat of Henry Clay by James K. Polk.

SALT RIVER.—A political term applied to an imaginary stream up which defeated candidates are said to journey. Although many go up no one ever comes down this stream.

MAINE LAW.—A political term, synonymous with prohibitory legislation, owes its origin to the fact that Maine was the first state to pass a stringent law prohibiting the sale of liquor. The law was adopted by Maine in 1851, and has since been adopted by several other states.

RELIGIOUS DIVISIONS OF THE WORLD.

Roman Catholics	201,000,000
Protestants	106,000,000
Eastern Churches	81,000,000
Followers of Confucius	80,000,000
Sinto Religion	14,000,000
Judaism	7,000,000
Buddhists	340,000,000
Mohammedans	201,000,000
Brahmins	175,000,000

The number of the various churches are distributed as follows:

	R.Cath.	*Protest'ts.*	*East Ch.*
America	47,300,000	30,000,000	.....
Europe	147,300,000	71,500,000	69,300,000
Asia	4,900,000	1,800,000	8,500,000
Africa	1,100,000	1,200,000	3,200,000
Australia and Polynesia	400,000	1,500,000	.....
Total	201,000,000	106,000,000	81,000,000

NOTES ON BELTING.—Don't overwork belts by overloading them or by running them tighter than necessary.

The whole arrangement of shafting and pulleys should be under the direction of a mechanical engineer, or competent machinist. Destruction of machinery and belts, together with unsatisfactory results in the business, is a common experience which may, in most cases, be traced to want of knowledge and care in the arrangements of the machinery, and in the width and style of the belts bought, and in the manner of their use, while the manufacturers of the "outfit" are often blamed for bad results which are caused by the faulty management of the mill-owner himself.

Having properly arranged the machinery for the reception of the belts, the next thing to be determined is the length and width of the belts.

When it is not convenient to measure with the tape-line the length required the following rule will be found of service:—Add the diameter of the two pulleys together, divide the result by 2, and multiply the quotient by 3¼, then add this product to twice the distance between the centers of the shafts, and you have the length required.

The width of belt needed depends upon three conditions:—1. The tension of the belt. 2. The size of the smaller pulley, and the proportion of the surface touched by the belt. 3. The speed of the belt.

The working adhesion of a belt to the pulley will be in proportion both to the number of square inches of belt contact with the surface of the pulley, and also to the arc of the circumfer-

ence of the pulley touched by the belt. This adhesion forms the basis of all right calculation in ascertaining the width of belt necessary to transmit a given horse-power.

In the location of shafts that are to be connected with each other by belts, care should be taken to secure a proper distance one from the other. It is not easy to give a definite rule as to what this distance should be. Circumstances generally have much to do with the arrangement, and the engineer or machinist must use his judgment, making all things conform, as far as may be, to general principles. This distance should be such as to allow of a gentle sag to the belt when in motion.

A general rule may be stated thus:—Where narrow belts are to be run over small pulleys,—15 feet is a good average,—the belt having a sag of 1½ to 2 inches.

For larger belts, working on larger pulleys, a distance of 20 to 25 feet does well, with a sag of 2½ to 4 inches.

For main belts working on very large pulleys, the distance should be 25 to 30 feet, the belts working well with a sag of 4 to 5 inches.

If too great a distance is attempted, the weight of the belt will produce a very heavy sag, drawing so hard on the shaft as to produce great friction in the bearings, while at the same time the belt will have an unsteady flapping motion, which will destroy both the belt and machinery.

If possible to avoid it, connected shafts should never be placed one directly over the other, as in such case the belt must be kept very tight to do the work. For this purpose, belts should be carefully selected of well stretched leather.

It is desirable that the angle of the belt with the floor should not exceed 45 deg. It is also desirable to locate the shafting and machinery so that belts should run off from each shaft in opposite directions, as this arrangement will relieve the bearings from the friction that would result when the belts all pull one way on the shaft.

The diameter of the pulleys should be as large as can be admitted, provided they will not produce a speed of more than 3,750 feet of belt motion per minute. Some authorities limit this speed to 3,000 feet.

The pulley should be a little wider than the belt required for the work.

The motion of driving should run with, and not against, the laps of the belts.

Tightening or guide pulleys should be applied to the slack side of belts and near the smaller pulley.

Quick-motion belts should be made as straight and as uniform in section and density as possible, and endless if practicable, that is, with permanent joints.

Belts which run loose, will, of course, last much longer than those which must be drawn tightly to drive—tightness being evidence of overwork and disproportion.

Never add to the work of a belt so much as to overload it.

The transmitting power of a double belt is to that of a single belt as 10 is to 7. In ordering pulleys, the kind of belt to be used should always be specified.

The strongest part of belt leather is near the flesh side, about ⅛ the way through from that side. It is therefore desirable to run the grain (hair) side on the pulley; in order that the strongest part of the belt may be subject to the least wear.

The flesh side is not liable to crack, as the grain side will do when the belt is old, hence it is better to crimp the grain than to stretch it.

Leather belts run with grain side to the pulley will drive 30 per cent more than if run with flesh side. The belt, as well as the pulley, adheres best when smooth, and the grain side adheres best because it is smoothest.

A belt adheres much better and is less liable to slip when at a quick speed than at a slow speed. Therefore it is better to gear

a mill with small pulleys and run them at a high velocity than with large pulleys and to run them slower. A mill thus geared costs less and has a much neater appearance than with large heavy pulleys.

Belts should be kept clean and free from accumulations of dust and grease, and particularly from contact with lubricating oils, some of which permanently injure leather.

Leather belts must be well protected against water, and even moisture.

India-rubber is the proper substance for belts exposed to the weather, as it does not absorb moisture and stretch and decay.

Belts should be kept soft and pliable.

TIGHT BELTS.—Clamps with powerful screws are often used to put on belts with extreme tightness, and with most injurious strain upon the leather. They should be very judiciously used for horizontal belts, which should be allowed sufficient slackness to move with a loose undulating vibration on the returning side, as a test that they have no more strain imposed than is necessary simply to transmit the power.

RULES FOR CALCULATING THE HORSE POWER WHICH CAN BE TRANSMITTED BY BELTING.—No rules can be given which will apply to all cases. Circumstances and conditions must and will modify them. Belts, for instance, for machines which are frequently stopped and started, and shifting belts must be wider, to stand the wear and tear and to overcome the starting friction, than belts which run steadily and uninterruptedly. For belts, however running under ordinarily favorable conditions the rules given below may be regarded as safe and reliable.

The average thickness of single belts is 3-16 of an inch, and when made of good ox-hide, well tanned, their breaking strength, per inch of width, has been determined as follows:

In the solid leather	675 lbs.
At the rivet holes of splices	362 "
At the lacing holes	210 "

The safe working tension is assumed to be 45 lbs. per inch of width, which is equal to a velocity of about 60 square feet per minute per horse-power, which is safe practice for single belts in good condition

To find the horse-power of a belt: Multiply the circumference (in inches) of the pulley by the number of revolutions per minute, and the product by the width of the belt, and divide by 8,640.

FUSING POINT.—The following articles melt at the degree of heat Fahrenheit above zero opposite each:

Antimony	797	Gutta Percha	150
Brass	1,900	Lead	617
Bismuth	500	Lard	96
Copper	1,742	Silver	1,832
Cast Iron	2,912	Tin	428
Gold	2,282	Zinc	707
Glass	400	Ice	35

FREEZING POINT.—The following table indicates the degree of cold above zero Fahrenheit, at which the liquids named solidify:

Strong Wine	20	Milk	29
Turpentine (Spirits)	15	Water	32

BOILING POINT.—The degrees above zero Fahrenheit at which liquids boil is indicated below:

Quicksilver	630	Petroleum	305
Linseed Oil	600	Water	210
Alcohol	175	Blood Heat	98

VELOCITY OF FALLING BODIES.—The velocities of falling bodies are as the times of their descent and the spaces fallen through are as the square of the times. The force of gravity varies slightly at different latitudes. At 45 deg. the velocity for the first second of the fall is 16.083 feet. For practical purposes it is sufficiently accurate to call it 16 feet. The following table exhibits the relation of time, space and velocity:

Time in Sec.	Space fallen through in feet.	Velocity acquired at end of time, feet.	Space fallen through in last second of fall, in feet.
1	16	32	16
2	64	64	48
3	145	96	80
4	257	129	113
5	402	161	145
6	580	193	177
7	789	225	209
8	1,060	257	241
9	1,303	290	273
10	1,600	322	306

VELOCITY OF SOUND.—The velocity through air increases with the temperature. At

32 deg. Fahrenheit, velocity = 1,093 feet per second.
62 " " " = 1,126 " "
90 " " " = 1,156 " "

TELEGRAPH MILEAGE, ETC.—The United States has about three times as many miles of telegraph line as Russia, which has about 78,000 miles, being the most of any foreign country. The Western Union Line had 150,000 miles of line in 1884, or 433,000 miles of wire. It transmits over 40,000,000 messages in a year, and realizes a profit of about $7,750,000 per annum. At an average cost to the sender of forty-eight cents per message, the average profit to this company is about nineteen cents a message. Total telegraph mileage in the world is 719,000.

THE IRON FURNACES in the United States number about 690 and have an annual capacity of over 5,200,000 tons of pig iron. The full capacity is not taxed, the requirements not reaching so high.

THE AVERAGE WEIGHT OF PERSONS in America is: Man, 144 pounds; woman, 122 pounds.

BIG TREES.—There are in Calaveras county, California, 10 trees over 30 feet in diameter, and 86 with diameters ranging from 14 to 29 feet. These trees are believed to be from 900 to 2,000 years old. They average 200 feet high, the tallest being 244 feet.

THE ANNUAL EXPENDITURES OF THE GOVERNMENT of the United States is about $190,000,000 for all purposes.

NEWSPAPERS, NUMBER IN UNITED STATES.—The number of daily newspapers in the United States is over 1,400, and the number of papers printed every day is upwards of 5,300,000. The number of tri-weeklies, 60; semi-weeklies, 200; weeklies, 10,500; fortnightlies, 425; monthlies, 1,600; quarterlies, etc., 120. The total number of papers and periodicals published is about 14,000.

BOOKS, NUMBER OF, PUBLISHED.—The number of new books published in the world averages over 100 different ones per day.

DIVORCES.—The number of divorces per 1,000 marriages, is 4 in London, 11 in Berlin, 15 in Munich, 25 in Vienna, 25 in Paris, 48 in Chicago, 73 in Boston, and 218 in San Francisco.

SIGNERS OF THE MAGNA CHARTA.—Out of the 26 barons who signed the Magna Charta, only three could write their names, the remainder made their marks.

BIGGEST DIAMONDS.—The six largest diamonds in the world are the Kohinoor, weighing 103 carats; Star of Brazil, 125 carats; Regent of France, 136 carats; Austrian Kaiser, 139 carats; Russian Czar, 193; Rajah of Borneo, 367 carats.

SNOW, when melted, produces one-eighth of its volume of water.

CARRYING CAPACITY OF A TEN-TON FREIGHT CAR.

Cattle	18 to 20 head.	Butter	20,000 pounds.
Hogs	50 " 60 "	Lumber	6, 00 feet.
Sheep	80 " 100 "	Barley	300 bushels.
Whisky	60 barrels.	Wheat	340 "
Salt	70 "	Flax Seed	360 "
Lime	70 "	Apples	70 "
Flour	90 "	Corn	400 "
Eggs	130 to 160 "	Potatoes	430 "
Flour	200 sacks.	Oats	680 "
Wood	6 cords.	Bran	1,000 "

DURABILITY OF WOODS.—Experiments by driving sticks, made of different woods, each 2 feet long and 1½ inches square into the ground, only one-half an inch projecting outward, have been made. It was found that in five years, all those made of oak, elm, ash, fir, soft mahogany, and nearly every variety of pine, were totally rotten. Larch, hard pine and teak wood were decayed on the outside only; while acacia and poplar, with the exception of being also slightly attacked on the exterior, were otherwise sound. Hard mahogany, locust and cedar of Lebanon were in tolerably good condition; but only Virginia cedar was found as good as when put in the ground. This is of some importance to builders, showing what woods should be avoided, and what others used by preference in underground work. The duration of wood when kept dry is very great, as beams still exist which are known to be nearly 1,400 years old. Piles driven by the Romans prior to the Christian era have been examined of late, and found to be perfectly sound after an immersion of nearly 2,000 years. Hard wood stumps

decay in 5 to 7 years; sprucestumps decay in about the same time hemlock stumps in 8 to 9 years; cedar, poplar, 8 to 12 years; pine stumps last a generation. Cedar, oak, poplar, yellow pine and chestnut are the most durable woods in dry places.

LIMIT OF PERPETUAL SNOW AND GROWTH OF TREES.—On the Andes, in lat. 2 deg., the limit of perpetual snow is 14,760 ft. In Mexico, lat. 19 deg., the limit is 13,800 ft.; on the peak of Teneriffe, 11,454 ft.; on Mount Etna, 9,000 ft.; on Caucasus, 9,900 ft.; on the Pyrenees, 8,400 ft.; in Lapland, 3,100 ft.; in Iceland, 2,890 ft. The walnut ceases to grow at an elevation of 3,600 ft.; the yellow pine at 6,200 ft.; the ash at 4,800 ft.; and the fir at 6,700 ft. The loftiest inhabited spot on the globe is the Port House of Ancomarca, on the Andes, in Peru, 16,000 feet above the level of the sea. The fourteenth peak of the Himalayas, in Asia, 25,695 feet high, is the loftiest mountain in the world.

AREA OF IMPORTANT ISLANDS.

	Sq. Miles.		Sq. Miles.
Azores	996	Madagascar	233,315
Bahamas	5,422	Malta	95
Borneo	200,000	New Zealand	94,000
Ceylon	24,700	Sandwich	6,000
Crete	6,200	San Domingo	18,000
Cuba	42,883	Sicily	440
Cyprus	9,000	Staten Island	112
Hayti	11,000	St. Helena	47
Long Island	1,682	Vancouver's	13,000

FASTEST ONE MILE TIME.—Trotting horse Maud S, 2 min., 9¼ seconds; pacing horse Johnston, 2 min., 6¼ seconds; running, Ten Broecke, 1 min., 39¾ seconds; running man, W. Cummings, 4 min., 16½ seconds; swimming man, C. F. Senk, 12 min. 42¼ seconds.

AGES ATTAINED BY BIRDS.

Blackbird lives	13 years.	Parrot lives	65 years.
Blackcap lives	15 years.	Partridge lives	15 years.
Canary lives	24 years.	Peacock lives	24 years.
Crane lives	27 years.	Pelican lives	58 years.
Crow lives	100 years.	Pheasant lives	15 years.
Eagle lives	100 years.	Pigeon lives	20 years.
Fowl (common) lvs.	12 years.	Raven lives	100 years.
Goldfinch lives	15 years.	Robin lives	12 years.
Goose lives	50 years.	Skylark lives	30 years.
Heron lives	60 years.	Sparrow Hawk lives	40 years.
Lark lives	18 yesrs.	Swan lives	100 years.
Linnet lives	23 years.	Thrush lives	10 years.
Nightingale lives	18 years.	Wren lives	3 years.

AGES ATTAINED BY DIFFERENT ANIMALS.—An elephant lives 400 years; a whale, 400; a tortoise, 100; a camel, 40; a horse, 30; a bear, 25; a lion, 30; an ox, 25; a cat, 15; a dog, 16; a sheep, 10; a squirrel, 8; a guinea pig, 7.

THE USE OF CAPITALS.—1. Every entire sentence should begin with a capital. 2. Proper names, and adjectives

derived from these, should begin with a capital. 3. All appellations of the deity should begin with a capital. 4. Official and honorary titles begin with a capital. 5. Every line of poetry should begin with a capital. 6. Titles of books and the heads of their chapters and divisions are printed in capitals. 7. The pronoun, I, and the exclamation, O, are always capitals. 8. The days of the week, and the months of the year, begin with capitals. 9. Every quotation should begin with a capital letter. 10. Names of religious denominations begin with capitals. 11. In preparing accounts, each item should begin with a capital. 12. Any word of special importance may begin with a capital.

VITALITY OF SEEDS, showing the limit of time beyond which the seeds named become useless for sowing.

Beans	2 years.	Onion	1 year.
Beets	7 years.	Parsnip	1 year.
Cabbage	4 years.	Peas	2 years.
Carrot	2 years.	Radish	3 years.
Celery	2 years.	Squash	10 years.
Cucumber	10 years.	Sweet Corn	2 years.
Lettuce	3 years.	Tomato	7 years.
Melon	10 years.	Turnip	4 years.

THERMOMETERS.—Fahrenheit, boiling point, 212 deg.; freezing point, 32 deg. Centigrade, boiling point, 100 deg.; freezing point, 0 deg. Reaumur, boiling point, 80 deg.; freezing point, 0 deg.

RULES FOR OBTAINING WEIGHT OF IRON.—For round bars multiply the square of the diameter in inches by the length in feet, and the product by 2.6. The product will be the weight in pounds, nearly.

For square and flat bars multiply the area of the end of the bar in inches by the length in feet, and that by 3.32. The product will be the weight in pounds, nearly.

Wrought iron, usually assumed: A cubic foot, 480 lbs; a square foot, 1 inch thick, 40 lbs; a bar 1 inch square, 1 foot long, 3⅓ lbs; a bar 1 inch square, 1 yard long, 10 lbs.

To find the weight of cast iron balls when the diameter is given, multiply the cube of the diameter by .1377.

To find the diameter of cast iron balls when the weight is given, multiply the cube of the weight by 1.936.

To find the weight of a spherical shell: From the weight of a ball of the outer diameter subtract the weight of one of the inner diameters.

WEIGHT OF GRINDSTONES.—Square the diameter (in inches); multiply by thickness (in inches); then by the decima .06363; the product will be the weight of the stone in pounds.

RAILROAD IRON MILE OF TRACK.—To find the number of gross tons of rail to the mile: divide the weight per yard by 7 and multiply by 11. Example. For 56 pound rail: 56 divided by 7 equals 8 multiplied by 11, equals 88 tons. The number of tons of 2,000 lbs. required per mile is very nearly 1¾ times the weight per yard.

CROSS-TIES PER MILE OF SINGLE TRACK.—18 inches from center to center, 3,520 ties; 20 inches, 3,768 ties; 22 inches, 2,889 ties; 22.5 inches, 2,816 ties; 24 inches, 2,610 ties; 25.7 inches, 2,464 ties; 27 inches, 2,347 ties; 27.7 inches, 2,288 ties; 30 inches, 2,112 ties; 33 inches, 1,920 ties; 36 inches, 1,760 ties.

FENCES.—According to the best estimates there are 6,000,000 miles of farm fences in the United States, costing over $2,000,000,000. In many states the fences on a farm cost more than the buildings standing on it, and that, too, where lumber is abundant and cheap.

WEIGHT OF VARIOUS MATERIALS.—The following table gives the weight per cubic foot of the various materials, etc., named:

Materials.	Lbs.
Asphaltum	87
Basalt	181
Brick, common	from 100 to 125
" pressed	134
" fire	150
Brickwork, in mortar	110
" " cement	112
Cement, Portland, loose	78
" Rosendale "	60
Chalk, solid	145
Charcoal, from birch	34
" " fir	28
" " oak	21
" " pine	18
Clay	119
Coal, anthracite	93.5
" bituminous	84
" cannel	79
Coke	46
Concrete, in cement	137
" ordinary	119
Earth	from 77 to 125
Emery	250
Flint	162
Glass, flint	192
" common window	157
" plate	172
" flooring	158
Granite, gray	163
" red	165
Gutta-percha	60
Gypsum	143
Gunpowder, coarse	57
" fine	56
Ivory	114
Limestone	168
Lime, quick	53
Marble	168
Masonry, ashlar	160
" rubble	180
Mortar, average	106
Millstone	155
Pitch	72
Plaster of Paris, cast	80
Plumbago	140
Porphyry	170
Pumice-stone	57
Quartz	165
Sand, river	117
" coarse	100
Sandstone	150
Slate, American	175
" Welsh	180
Snow, fresh fallen	5 to 12
" wet and compacted by rain	15 to 50
Sulphur	125
Tallow	58.6
Tar	63
Trap	170
Tile	115
Wax, bees	60.5

WEIGHT OF VARIOUS WOODS per cubic foot are given below:

Timber.	Lbs.
Apple	49
Ash	47
Beech	43
Birch	45
Box	60
Cedar, West Indian	47
" American	35
" Lebanon	30
Cherry	42
Chestnut	41
Cork	15
Ebony	74
Elm	35
Hemlock	25
Hickory	53
Hornbeam	47
Ironwood	71
Larch	35
Lignum-vitæ	83
Mahogany, Spanish	53
" Honduras	35
Maple, rock	49
" soft	42
Oak, live	60
" white	52
" red	45
Pine, white	25
" yellow, Northern	35
" " Southern	45
Sycamore	37
Teak	46
Walnut	35

WEIGHT OF LIQUIDS.—The weight of fresh water is in practice usually assumed at 62½ lbs. per cubic foot. But 62¼ would be nearer the truth at ordinary temperatures, about 70 deg.; or a lb. =27.759 cubic inches.

Liquid.	Lbs.	Liquid.	Lbs.
Water, distilled, 60 deg. F.	8.33	Honey	12.
" sea	8.55	Milk	8.55
" Dead Sea	10.4	Molasses	11.66
Acid, Acetic	8.78	Oil, Linseed	7.85
" Nitric	10.16	" Olive	7.62
" Sulphuric	15.48	" Turpentine	7.16
" Muriatic	9.93	" Whale	6.65
Alcohol, pure	6.7	Naphtha	7.
" proof,	7.62	Petroleum	7.39
" of commerce	6.93	Tar	8.4
Cider	8.4	Wines (average)	8.3

Atmospheric air at 60 deg. Fahr., and under pressure of one atmosphere, or 14.7 lbs. per sq. inch weighs 1-815 part as much as water at 60 deg. Specific gravity = .00123 = .0765 lbs. per cubic foot.

WEIGHT OF VARIOUS METALS.—The weights of the various metals per cubic foot are given below:

Metals.	Lbs.	Metals.	Lbs.
Aluminum	166	Iron, wrought	485
Antimony, cast	419	Lead, cast	708
Bismuth	613	Lead, rolled	711
Brass, cast	524	Mercury	849
Bronze	534	Platinum	1,344
Copper, cast	537	Platinum, sheet	1,436
Copper wire	555	Silver, pure	654
Gold, 24 caret	1,208	Silver, standard	644
Gold, standard	1,106	Steel	490
Gun metal	528	Tin, cast	455
Iron, cast	450	Zinc	437

WEIGHT OF VARIOUS PRODUCTS.

	Per bu.		Per bu.
Wheat	60 lbs.	Hungarian-grass seed	50 lbs.
Corn (shelled)	56 "	Broom-corn seed	52 "
Corn (on the cob)	70 "	Sorghum seed	40 "
Rye	56 "	Corn-meal	50 "
Barley	48 "	Bran	20 "
Buckwheat (in Pa.)	50 "	Beans	60 "
" (in Ky.)	52 "	Onions (in Pa. and Ky.)	57 "
" (in Mass.)	48 "	" (in Mass.)	52 "
Oats (in Ills., Mass.)	32 "	Salt, Turks' Island	76 "
" (in Ohio)	33 "	" Syracuse	56 "
" (in Kentucky)	33½ "	" Liverpool	50 "
" (in Maine and Pa.)	30 "	Potatoes	60 "
Clover-seed	60 "	Peas	64 "
Flax-seed	56 "	Dried Apples (in Pa.)	22 "
Timothy-seed	45 "	" " (in Ill.)	24 "
Hemp-seed	48 "	" Peaches (in Pa.)	33 "
Bluegrass-seed	14 "	" " (in Ill.)	32 "
Red-top seed	14 "		

CAPACITY OF BOXES.—A box 24 inches long by 16 inches wide and 28 inches deep will contain 5 bushels. A box 24 inches long by 16 inches wide and 14 inches deep will contain 2½ bushels. A box 14 inches wide, 23 1-25 inches long and 10 inches deep, will contain 1½ bushels. A box 16 inches square and 8 2-5

inches deep, will contain 1 bushel. A box 16 inches long by 8 2-5 inches wide and 8 inches deep, will contain ½ bushel. A box 8 inches square and 8 2-5 inches deep, will contain 1 peck. A box 8 inches long by 8 2-5 inches wide and 4 inches deep will contain 1 gallon. A box 8 inches long by 4 inches wide and 4 1-5 inches deep will contain ½ gallon. A box 4 inches square and 4 1-5 inches deep will contain 1 quart.

RULE FOR MEASURING CAPACITY OF SQUARE CISTERNS.—Multiply the length in feet by the width in feet, and multiply that by 1.728, then divide by 231. The quotient will be the number of gallons capacity of one foot in depth.

CIRCULAR CISTERN.—Multiply the square of the diameter by .7854, or the square of the circumference by .07958, in order to find the area of the cistern, then multiply the area by the depth in inches, and divide the product by 231. The quotient will equal the number of gallons the cistern will contain. In measuring cisterns, etc., 31½ gallons are estimated to one barrel; 63 gallons to one hogshead.

SIZES OF PAPER.—Size of flat writing papers, card-board, etc.: Letter, 10x16; flat cap, 14x17; crown, 15x19; demy, 16x21; folio post, 17x22; medium, 18x23; royal, 19x24; card-board, 22-28; colored medium cover paper, 20x25; glazed and plated cover paper, 20x24; flat foolscap, 13x16; double flat letter, 16x20; check folio, 17x24; double cap, 17x28; super royal, 20x28; imperial, 23x31 inches.

SIZES OF BOOKS.—A sheet folded in 2 leaves makes a folio size; 4 leaves, quarto, or 4to; 8 leaves, octavo, or 8vo; 12 leaves, duodecimo, or 12mo; 16 leaves, sixteenmo, or 16mo. These names are still retained to designate the sizes of books, though the reason for them has ceased.

SEED TO THE ACRE.—The opinions of farmers differ materially; and then the climate and soil have much to do with the quantity. The quantity of seed sown broadcast to the acre, is about as follows:

Wheat	1¼ to 2 bu.	Flax	½ to 2 bu.
Barley	1½ to 2½ "	Timothy	12 to 24 qts.
Oats	2 to 4 "	Mustard	8 to 20 "
Rye	1 to 2 "	Red-top	12 to 16 "
Buckwheat	¾ to 1½ "	Flat Turnip	2 to 3 lbs.
Millet	1 to 1½ "	Red Clover	10 to 16 "
Indian-corn	1 to 2 "	White Clover	3 to 4 "
Beans	2 to 3 "	Kentucky Blue-grass	10 to 15 "
Peas	2½ to 3½ "	Orchard Grass	20 to 30 "
Hemp	1 to 1½ "		

The quantity per acre, when planted in rows, in drills, is about thus:

Broom-corn	1 to 2½ bu.	Onions	4 to 5 lbs.
Beans	1½ to 2 "	Carrots	2 to 2½ "
Peas	1½ to 2 "	Parsnips	4 to 5 "
Peanuts	1 to 2 "	Beets	4 to 6 "

HAY.—A ton is 512 cubic feet in the mow, that is, when it has settled down and become solid.

TO MEASURE CORN IN CRIBS when the Sides are Straight.—Multiply the length, breadth and height in inches together, and divide by 3744 (26 inch gauge), or the number of cubic inches in a bushel of ears. **When the Sides are Flaring,** multiply half the sum of the top and bottom width, the perpendicular height, and the length in inches together, and divide the product as in the previous rule.

WEIGHTS AND MEASURES.

LONG MEASURE.

12 inches	make	1 foot.
3 feet	"	1 yard.
5½ yards or 16½ feet	"	1 rod.
4 rods	"	1 chain.
10 chains or 40 rods	"	1 furlong.
8 furlongs, or 5,280 feet	"	1 mile.

SQUARE OR SURFACE MEASURE.

144 square inches	make	1 square foot.
9 square feet	"	1 square yard.
30¼ square yards	"	1 square rod.
16 square rods	"	1 square chain.
10 square chains	"	1 acre.
640 acres	"	1 square mile.

CUBIC MEASURE.

1728 cubic inches	make	1 cubic foot.
27 cubic feet	"	1 cubic yard.
230 cubic inches	"	1 standard gallon (U. S.).
2150.42 cubic inches	"	1 standard bushel (U. S.).
50 cubic feet round timber	"	1 ton.
40 cubic feet hewn timber	"	1 ton.
40 cubic feet shipping timber	"	1 ton.
16 cubic feet	"	1 cord foot.
8 cord feet, or 128 cubic feet	"	1 cord of wood.
16½ cubic feet	"	1 perch of stone.
36 bushels, or 57¼ cubic feet	"	1 chaldron (for coal, etc.)

SURVEYOR'S MEASURE.

7.92 inches	make	1 link.
100 links, or 22 yards	"	1 chain.
80 chains	"	1 statute mile.
69.121 miles	"	1 geographical degree.

CLOTH MEASURE.

2¼ inches	make	1 nail.
4 nails	"	1 quarter.
4 quarters	"	1 yard.
3 quarters	"	1 ell Flemish.
5 quarters	"	1 ell English.
6 quarters	"	1 ell French.

MISCELLANEOUS WEIGHTS.—Barrel of flour weighs 196 lbs.; salt, 280 lbs.; beef, 200 lbs.; pork, 200 lbs.; fish 200 lbs.; keg powder, 25 lbs ; stone of lead or iron, 14 lbs.; pig of lead or iron, 21½ stone. Anthracite coal, broken, cubic foot averages 54 lbs.; a ton loose, occupies 40 to 43 cubic feet Bituminous coal, broken, cubic foot averages 49 lbs.; a ton, loose, occupies 43 to 48 cubic feet.

Cement (Hy.) Rosendale	Bush.	= 70 lbs.
" " Louisville	"	= 62 "
" " Portland	"	= 96 "
Gypsum, ground	"	= 70 "
Lime, loose	"	= 70 "
Lime, well shaken	"	= 80 "
Sand at 98 lbs. per cubic ft	"	=122⅙"
18.29 bush.=ton	1.181 ton	=cu.yd.

A cable's length.= 240 yards.	A cord of wood..= 128 cu. ft.
20 articles.....= 1 score.	1 hand .....= 4 inches.
12 dozen .....= 1 gross.	1 span..... = 9 inches.
12 gross .....= 1 great grs.	

SHOEMAKERS' MEASURE.—No. 1 of small size is 4⅓ inches long. No. 1 of large size is 8 11-24 inches long. Each succeeding number of either size is one-third of an inch additional length. Sixty pairs of shoes equal one case.

VALUE OF SCRIPTURAL COINS:

	Dollars.	*Cents.*
A Gerah	0	2.5
10 = A Bekah	0	25.09
20 = 2 = A Shekel	0	50.187
1,200 = 120 = 50 = A Maneh, or Mina (Heb.).	25	9 35
60,000 = 6,000 = 3,000 = 60 = A Talent	1,505	62.5
A Solidus Aureus, or Sextula, was worth	2	64 09
A Siclus Aureus, or Gold Shekel, was worth	8	3
A Talent of Gold was worth	24,309	0

SCRIPTURAL WEIGHTS reduced to Troy weight:

	Lbs.	*Oz.*	*Dwt.*	*Gr.*
The Gerah, one-twentieth of a Shekel	0	0	0	12
The Bekah, half a Shekel	0	0	5	0
The Shekel	0	0	10	0
The Maneh, 60 Shekels	2	6	0	0
The Talent, 50 Manehs, or 3,000 Shekels	125	0	0	0

SCRIPTURAL LIQUID MEASURE reduced to wine measure:

	Gals.	*Pints.*
A Caph	0	0.625
1.3 = A Log	0	0.833
5.3 = 4 = A Cab	0	3.333
6 = 12 = 3 = A Hin	1	2
32 = 24 = 6 = 2 = A Seah	2	4
96 = 72 = 18 = 6 = 3 = A Bath, Ephah or Firkin	7	4.50
960 = 720 = 180 = 60 = 30 = 10 = A Kor, Choros, or Homer	75	5.25

SCRIPTURAL DRY MEASURE reduced to corn measure:

	Bush.	*Pks.*	*Gal.*	*Pints.*
A Gachal	0	0	0	0.141
20 = A Cab	0	0	0	2.833
36 = 1.8 = An Omer, or Gomer	0	0	0	5.1
120 = 6 = 3.3 = A Seah	0	1	0	1
360 = 18 = 10 = 3 = An Ephah	0	3	0	3
1,800 = 90 = 50 = 15 = 5 = A Letech	4	0	0	0
3,600 = 180 = 100 = 30 = 10 = 2 = A Homer, or Kor	8	0	0	1

SCRIPTURAL LONG MEASURE reduced to feet and inches:

	Feet.	*Inches.*
A Digit	0	.912
4 = A Palm	0	3.648
12 = 3 = A Span	0	10.944
24 = 6 = 2 = A Cubit	1	9.888
96 = 24 = 8 = 4 = A Fathom	7	3.552
144 = 36 = 12 = 6 = 1.5 = Ezekiel's Reed	10	11.328
192 = 48 = 16 = 8 = 2. = 1.3 = An Arabian Pole	14	7.104
1,920 = 480 = 160 = 80 = 20. = 13.3 = 10 = A Measuring Line	145	11.04

	Miles.	*Feet.*
A Cubit	0	1.824
400 = Stadium, or Furlong	0	729.6
2,000 = 5 = A Sabbath Day's Journey	0	3,648
4,000 = 10 = 2 = An Eastern Mile	1	2,016
12,000 = 30 = 6 = 3 = A Parasang	4	768
96,000 = 240 = 48 = 24 = 8 = A Day's Journey	33	864

COMPOSITION OF SOLDERS.—Fine solder, two-thirds tin and one-third lead; glazing solder, half tin and half lead; plumbing solder, one-third tin and two-thirds lead.

NUMBER POUNDS IN A BUSHEL IN DIFFERENT STATES.

STATES.	Wheat.	Rye.	Oats.	Barley.	Buckwheat.	Shelled Corn.	Corn on the Cob.	Cornmeal.	Potatoes	Sweet Potatoes.	Onions.	Turnips.	Beans.	Peas.	Dried Apples.	Dried Peaches.	Flax Seed.	Timothy Seed.	Blue Grass Seed.	Clover Seed.	Coal.
Arkansas	60	56	32	48	52	...	70	50	60	50	57	...	60	46	24	33	56	45	14	60	80
California	60	54	32	50	40	52	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Connecticut	60	56	32	48	56	56	...	50	60	...	50	51	60	60	24	...	...	...	...	...	80
Georgia	60	56	32	47	52	56	70	48	60	55	57	55	60	60	24	33	56	45	14	63	80
Illinois	60	56	32	48	51	56	68	50	60	55	57	55	60	60	25	33	56	45	14	60	80
Indiana	60	56	...	48	52	56	70	...	60	46	48	...	60	...	24	33	56	45	14	60	80
Iowa	60	56	32	48	52	56	70	50	60	50	57	55	60	60	24	33	54	45	14	60	80
Kansas	60	56	32	48	52	56	70	50	60	55	57	55	60	60	24	33	56	45	14	60	76
Kentucky	60	56	32	47	52	56	70	50	60	55	57	50	64	60	24	33	56	45	14	60	...
Maine	60	56	30	48	48	56	...	50	60	...	52	...	...	...	...	...	...	...	...	...	...
Massachusetts	60	56	32	48	48	56	70	50	60	56	52	58	60	60	23	28	56	45	14	60	80
Michigan	60	56	32	48	48	56	70	50	60	56	54	...	60	60	23	28	56	45	14	60	80
Minnesota	60	56	32	48	42	56	...	...	60	...	...	...	...	...	...	...	...	...	...	...	...
Missouri	60	56	32	48	52	56	...	...	60	...	57	...	60	...	24	33	56	45	14	60	80
New Hampshire	60	56	30	...	...	56	...	50	60	54	57	...	60	60	25	33	55	44	14	64	...
New Jersey	60	56	30	48	50	56	...	...	60	...	...	...	62	60	...	...	55	...	...	60	...
New York	60	56	32	48	48	56	...	46	60	...	...	...	60	60	22	33	56	45	...	64	...
North Carolina	60	56	30	48	50	54	...	...	...	...	...	...	...	50	...	...	...	...	...	60	...
Ohio	60	56	32	48	50	56	70	...	60	50	50	...	60	60	22	33	56	45	...	62	...
Pennsylvania	60	56	32	47	48	56	...	50	60	...	...	...	...	...	...	...	...	...	...	...	...
Rhode Island	60	56	32	48	...	56	...	50	60	...	50	...	60	60	26	33	44	...	14	60	...
South Carolina	60	56	32	48	52	56	70	50	60	50	57	...	60	60	26	33	50	45	14	60	...
Tennessee	60	56	32	48	50	55	72	50	61	50	56	...	60	60	26	...	...	45	14	60	...
Vermont	60	56	32	48	46	56	70	50	60	56	57	60	60	60	23	32	56	45	14	60	80
Virginia	60	56	32	48	52	56	70	...	60	...	56	55	60	60	23	28	56	45	14	60	...
Wisconsin	60	56	32	48	50	56	70	...	60	...	50	42	60	...	23	28	56	45	14	60	...

COMMON NAMES OF DRUGS.

Common Names.	*Chemical Names.*
Aqua fortis	Nitric acid.
Aqua regia	Nitro-muriatic acid.
Blue vitriol	Sulphate of copper.
Cream of tartar	Bitartrate potassium.
Calomel	Chloride of mercury.
Chalk	Carbonate calcium.
Caustic potash	Hydrate potassium.
Chloroform	Chloride of formyl.
Common salt	Chloride of sodium.
Copperas, or green vitriol	Sulphate of iron.
Corrosive sublimate	Bi-chloride of mercury.
Diamond	Pure carbon.
Dry Alum	Sulphate aluminum and potassium.
Epsom salts	Sulphate of magnesia.
Ethiops mineral	Black sulphide of mercury.
Fire damp	Light carburetted hydrogen.
Galena	Sulphide of lead.
Glauber's salt	Sulphate of sodium.
Glucose	Grape sugar.
Iron pyrites	Bi-sulphide iron.
Jeweler's putty	Oxide of tin.
King's yellow	Sulphide of arsenic.
Laughing gas	Protoxide of nitrogen.
Lime	Oxide of calcium.
Lunar caustic	Nitrate of silver.
Mosaic gold	Bi-sulphide of tin.
Muriate of lime	Chloride of calcium.
Saltpetre	Nitrate of potash.
Oil of vitriol	Sulphuric acid.
Potash	Oxide of potassium.
Realgar	Sulphide of arsenic.
Red lead	Oxide of lead.
Rust of iron	Oxide of iron.
Salmoniac	Muriate of ammonia.
Salt of tartar	Carbonate of potassa.
Slacked lime	Hydrate calcium.
Soda	Oxide of sodium.
Spirits of hartshorn	Ammonia.
Spirit of salt	Hydro-chloric or muriatic acid.
Stucco, or plaster of Paris	Sulphate of lime.
Sugar of lead	Acetate of lead.
Verdigris	Basic acetate of copper.
Vermillion	Sulphide of mercury.
Vinegar	Acetic acid (diluted).
Water	Oxide of hydrogen.
White precipitate	Ammoniated mercury.
White vitriol	Sulphate of zinc.

COMPARATIVE YIELD OF GRAINS, VEGETABLES AND FRUITS PER ACRE.

	Lbs. per acre.		*Lbs. per acre.*		*Lbs. per acre.*
Hops	442	Cherries	2,000	Apples	8,000
Wheat	1,260	Onions	2,800	Turnips	8,420
Barley	1,600	Hay	4,000	Cinq'e foil gra's	9,604
Oats	1,840	Pears	5,000	Vetches, green.	9,800
Peas	1,900	Grass	7,000	Cabbages	10,900
Beans	2,000	Carrots	6,000	Parsnips	11,200
Plums	2,000	Potatoes	7,500	Mangel Wurzel	22,000

AVERAGE VELOCITY.

	Per hour.
A man walks	3 miles.
A horse trots	7 "
A horse runs	20 "
Steamboat runs	18 "
Sailing vessel runs	10 "
Slow rivers flow	3 "
Rapid rivers flow	7 "
A moderate wind blows	7 "
A storm moves	36 "
A hurricane moves	80 "
A rifle ball moves	1,000 "
Sound moves	743 "
Light moves	192,000 miles per sec.
Electricity moves	288,000 " "

AVERAGE PER CENTAGE OF ALCOHOL IN LIQUORS.

Scotch Whisky	54.53	Currant Wine	20.50
Irish Whisky	53.9	Port	22.90
Rum	53.68	Madeira	22.27
Gin	51.6	Teneriffe	19.79
Brandy	53.39	Sherry	19.17
Burgundy	14.57	Claret	15.1
Cape Muscat	18.25	Elder	8.79
Champagne (still)	13.80	Ale	6.87
Champagne (sparkling)	12.61	Porter	4.2
Cider	5.2 to 9.8	Malaga	17.26
Constantia	19.75	Rhenish	12.8
Gooseberry Wine	11.48	Small Beer	1.28

PROMISSORY NOTES, LAWS OF.

Demand Notes are payable on presentation without grace, and bear legal interest after a demand has been made, if not so written. An indorser on a demand note is held only for a limited time, variable in different states.

A Negotiable Note must be made payable either to bearer, or be properly indorsed by the person to whose order it is made. If the indorser wishes to avoid responsibility, he can indorse "*without recourse.*"

A Joint Note is one signed by two or more persons, who each become liable for the whole amount.

Three Days' Grace are allowed on all time notes, after the time for payment expires; if not then paid, the indorser, if any, should be legally notified, to be held.

Notes Falling Due Sunday, or on a legal holiday, must be paid the day previous.

Notes Dated Sunday are void.

Altering a Note in any manner by the holder makes it void.

Notes Given by Minors are void.

The Maker of a note that is lost or stolen is not released from payment if the amount and consideration can be proven.

Notes Obtained by Fraud, or given by an intoxicated person cannot be collected.

An Indorser has a right of action against all whose names were previously on a note indorsed by him.

Deposits of Money in a Bank placed to the credit of depositors, are always subject to their check for full amount due.

ORIGIN AND MEANING OF PERSONAL NAMES.

MALE.

Names.	*Origin.*	*Meaning.*
Aaron	Hebrew	Mountain.
Abraham	Hebrew	Father of many.
Adam	Chaldaic	Red Earth.
Albert	Saxon	All bright.
Alexander	Greek	A helper of men.
Alfred	Saxon	All peace.
Amos	Hebrew	A burden.
Andrew	Greek	Courageous.
Anthony	Latin	Flourishing.
Archibald	German	A bold observer.
Arthur	British	A strong man.
Alonzo	Spanish	Chivalry.
Allan	Scotch	Pious Minstrel.
Benjamin	Hebrew	Son of a right hand.
Cecil	Saxon	Harmony.
Clarence	Saxon	Clear.
Charles	German	High spirited, noble.
Christopher	Greek	Christ bearing.
Claude	Saxon	Virtuous.
Cyrus	Persian	Great.
Daniel	Hebrew	God is judge.
David	Hebrew	Well beloved.
Donald	Spanish	A fine gentleman.
Edgar	Saxon	Fortunate, happy.
Edward	Saxon	Happy reaper.
Eugene	Greek	Nobly descended.
Francis	German	Free.
Frank	French	Generous, brave, openhearted.
Frederick	German	Rich, peace.
Gabriel	Hebrew	The strength of God.
George	Greek	A husbandman.
Guy	French	The mistleloe shrub.
Henry	German	A rich lord.
Herbert	German	A bright lord.
Hugh	Dutch	High, lofty.
Horace	Greek	Light of the sun.
Hans	German	Melodious singer.
Isaac	Hebrew	Laughter.
Jacob	Hebrew	A supplanter.
James	Roman	Charity, beguiling.
John	Hebrew	The grace of the Lord.
Joseph	Hebrew	Addition.
Jesse	Hebrew	The root of David.
Laurence	Latin	Crowned with laurel.
Lewis	French	Defender.
Luke	Greek	A wood or grove.
Louis	French	For the people.
Michael	Hebrew	Who is like God.
Mark	Latin	A hammer.
Martin	Latin	Martial.
Matthew	Hebrew	A gift.
Maurice	Latin	Spring of a moor.
Moses	Hebrew	Drawn from the water.
Nathaniel	Hebrew	Gift of God; no guile.
Nicholas	Greek	Victory of the people.
Nathan	Hebrew	Given; a gift.
Noah	Arabian	Peace; rest.
Owen	British	Well descended.
Oliver	Saxon	Peaceful; serene.
Oscar	Polish	Heart breaker.
Patrick	Latin	A nobleman.
Paul	Latin	Small; little.

Peter	Greek	A rock or stone.
Philip	Greek	A lover of horses.
Percy	Saxon	A Lord.
Raymond	German	Quiet; peace.
Reuben	Hebrew	The son of vision.
Richard	Saxon	Powerful.
Robert	German	Famous in counsel.
Roger	German	Strong counsel.
Samuel	Hebrew	Heard of God.
Stephen	Greek	A crown or garland.
Silas	Greek	Worthy to be praised.
Sidney	British	Bruised; troubled.
Theodore	Greek	The gift of God.
Thomas	Hebrew	A twin.
Timothy	Greek	A fearer of God.
Vincent	Latin	Conquering.
Walter	German	A woodmaster.
William	German	Defending many.
Wesley	English	Brightly shining.
Zachariah	Hebrew	Remembering the Lord.

FEMALE NAMES.

Abbie	English	A refuge.
Adeline	German	A princess.
Agnes	German	Chaste.
Alice	German	Noble.
Amy	French	Beloved.
Amelia	French	Loving
Anna	Hebrew	A prophetess.
Ada	Hebrew	A mountain.
Angeline	Roman	Sweet messenger.
Barbara	Latin	Foreign or strange.
Beatrice	Latin	Making happy.
Bertha	Greek	Bright or famous.
Blanche	French	Fair.
Bessie	Saxon	Little Eliza.
Belle	Spanish	The best; the gayest.
Bridget	Celtic	Shining; bright.
Catharine	Greek	Pure; good.
Charlotte	French	All noble.
Caroline	Latin	Noble spirited.
Clara	Latin	Clear and bright.
Constance	Latin	Constant.
Carrie	Latin	Pet Caroline.
Cornelia	Roman	Bright sunbeam.
Cora	Greek	Keen wit.
Dora	Celtic	Prolific.
Della	Spanish	Accommodating.
Delia	Celtic	Shining; bright.
Edith	Saxon	Happiness.
Eliza, Elizabeth,	Hebrew	The oath of God.
Emily	Saxon	A nurse.
Emma	German	A nurse.
Effie	Scotch	Heart's devotion.
Elsie	Welsh	Mirthful.
Emmaline	Saxon	My little nurse.
Ettie	German	Sprightly; household pet.
Frances	German	Free.
Florence	Italian	Vernal duty.
Flora	British	Lovely bloom.
Gertrude	German	All truth.
Grace	Latin	Favor.
Helen	Greek	A most beautiful woman.
Hannah	Hebrew	The Lord has come to her relief.
Harriet	British	A fine lady.
Hattie	English	A handsome lady.

Henrietta	British	Of noble birth.
Isabella	Spanish	Fair Eliza.
Ida	Greek	A lofty mountain.
Jane	British	God's grace.
Jeanette	Scotch	Little Jane.
Josephine	French	A saver of life.
Julia	Roman	Charming; virtuous.
Juliet	Roman	Noble and sprightly.
Jessie	Scotch	My present.
Katrina	German	My beautiful Kate.
Lucy	Latin	Shining.
Lydia	Greek	Descended from th Lord.
Louisa	French	Defender of the people.
Laura	Greek	Famed; worthy.
Lillie	Saxon	Purity.
Mabel	Latin	Lovely.
Margaret	German	A pearl.
Martha	Hebrew	Bitter.
Maud	Greek	A lady of honor.
Minnie	Hebrew	Numbered; prepared.
Mary	Hebrew	A drop of salt water; a tear.
Maria	Spanish	Mary.
Matilda	British	Queenly.
Nellie	Saxon	Fair and faithful.
Olive	Persian	Peace.
Paulina	Latin	Feminine of Paul.
Rose	Latin	Perfection.
Susan	Hebrew	A lily.
Sarah	Hebrew	A princess.
Viola	Spanish	Joyous visitant.

RELATIVE VALUE OF FOOD FOR STOCK.

One hundred pounds of good hay for stock are equal to:

Articles.	*Pounds.*	*Articles.*	*Pounds.*
Beets, white silesia	469	Lucerne	89
Turnips	369	Clover, red, dry	88
Rye-straw	397	Buckwheat	78½
Clover, red, green	373	Corn	62½
Carrots	371	Oats	59
Mangolds	368⅓	Barley	58
Potatoes, kept in pit	264	Rye	53½
Oat-straw	317	Wheat	44½
Potatoes	360	Oil-cake, linseed	43
Carrot leaves (tops)	135	Peas, dry	37½
Hay, English	100	Beans	23

HOUSEWIFE'S TABLES.

1 pound of wheat flour is equal to	1 quart.
1 pound and 2 ounces of Indian meal make	1 "
1 pound of soft butter is equal to	1 "
1 pound and 2 ounces of best brown sugar make	1 "
1 pound and 1 ounce of powdered white sugar make	1 "
1 pound of broken loaf sugar is equal to	1 "
4 large tablespoonfuls make	½ gill.
1 common-sized tumbler holds	½ pint.
1 common-sized wine-glass is equal to	½ gill.
1 tea-cup holds	1 gill.
1 large wine-glass	2 ounc's
1 tablespoonful is equal to	½ ounce

POPULATION OF THE WORLD.—Asia, 670,000,000; Europe, 320,000,000; Africa, 200,000,000; North America, 75,000,000; Oceanica, 40,000,000; South America, 30,000,000.

QUALIFICATIONS OF VOTERS IN THE VARIOUS STATES.

States.	Requirement as to Citizenship.	Residence in		
		State	Co.	Voting Prec'ct
Alabama	Citizens or declared intention.	1 yr.	3 mos	1 mo.
Arkansas	Citizens or declared intention.	1 yr.	6 mos	1 mo.
California	Actual citizens.	1 yr.	90 dys	30 dys.
Colorado	Citizens or declared intention.	6 mos	.....	.....
Connecticut	Actual citizens.	1 yr.	6 mos	6 mos.
Delaware	Actual County taxpayers	1 yr.	1 mo.	.....
Florida	United States citizens or declared intention.	1 yr.	6 mos	.....
Georgia	Actual citizens.	1 yr.	6 mos	.....
Illinois	Actual citizens	1 yr.	90 dys	30 dys.
Indiana	Citizens or declared intention.	6 mos	60 dys	30 dys.
Iowa	Actual citizens.	6 mos	60 dys	.....
Kansas	Citizens or declared intention.	6 mos	.....	30 dys.
Kentucky	Free white male citizens.	2 yrs.	1 yr.	60 dys.
Louisiana	Citizens or declared intention.	1 yr.	6 mos	30 dys.
Maine	Actual citizens.	3 mos	.....	.....
Maryland	Actual citizens.	1 yr.	6 mos	.....
Mas'chusetts	Citizens	1 yr.	.....	6 mos.
Michigan	Citizens or declared intention.	3 mos	.....	10 dys.
Minnesota	Citizens or declared intention.	4 mos	.....	10 dys.
Mississippi	Actual citizens.	6 mos	1 mo.	.....
Missouri	Citizens or declared intention.	1 yr.	60 dys	.....
Nebraska	Citizens or declared intention.	6 mos	.....	.....
Nevada	Citizens or declared intention.	6 mos	30 dys	.....
N.H'mpshire	Actual citizens.	.....	.....	T'n. 6 m
New Jersey	Actual citizens.	1 yr.	5 mos	.....
New York	Actual citizens.	1 yr.	4 mos	30 dys.
N. Carolina	Actual citizens.	12 mo	90 dys	.....
Ohio	Actual citizens.	1 yr.	.....	.....
Oregon	Citizens or declared intention.	6 mos	.....	.....
Penn	Actual citizens.	1 yr.	.....	2 mos.
Rhode Island	Actual tax-paying citizens.	1 yr.	.....	T'n. 6 m
S. Carolina	Actual citizens.	1 yr.	60dy	.....
Tennessee	Actual citizens.	12 mo	6 mos	.....
Texas	Citizens or declared intention.	1 yr.	6 mos	6 mos.
Vermont	Actual citizens.	1 yr.	.....	.....
Virginia	Actual citizens.	12 mo	.....	T'n. 3 m
W. Virginia	Actual citizens.	1 yr.	60 dys	.....
Wisconsin	Citizens or declared intention.	1 yr.	.....	.....

OIL IN SEEDS.

Kinds of Seed.	Per cent Oil.	Kinds of Seed.	Per cent Oil.
Rapeseed	55	Oats	6½
Sweet Almond	47	Clover hay	5
Turnip seed	45	Wheat bran	4
White mustard	37	Oat-straw	4
Bitter Almonds	37	Meadow hay	3½
Hempseed	19	Wheat-straw	3
Linseed	17	Wheat flour	3
Indian corn	7	Barley	2½

DIFFERENCE IN TIME.—The following table shows the time at different places when it it 12 o'clock (noon) at New York city.

NAMES OF CITIES.	Time when it is 12 noon at N.Y.	NAMES OF CITIES.	Time when it is 12 noon at N.Y.
Albany, N. Y.....	12.01 P.M.	Nashville, Tenn ..	11.09 A.M.
Atlanta, Ga.....	11.18 A.M.	Newark, N. J.....	11.59 A.M.
Auburn, N. Y.....	11.50 A.M.	Newburgh, N. Y..	12.00 M.
Baltimore, Md.....	11.50 A.M.	Newberryport, Mass.....	12.12 P.M.
Bangor, Me.....	12.21 P.M.	New Haven, Conn.	12.04 P.M.
Boston, Mass.....	12.12 P.M.	New Orleans, La.	10.56 A.M.
Bridgeport, Conn..	12.03 P.M.	Newport, R.I.....	12.11 P.M.
Brooklyn, N. Y....	12.00 M.	Norfolk, Va.....	11.51 A.M.
Buffalo, N. Y.....	11.40 A.M.	N'rthampton, Mass	12.05 P.M.
Burlington, Iowa..	10.51 A.M.	Norwich, Conn...	12.07 P.M.
Burlington, V. T..	12.03 P.M	Ogdensburg, N.Y.	11.54 A.M.
Charleston, S. C....	11.36 A.M.	Omaha, Neb	10.32 A.M.
Chicago, Ill	11.05 A.M.	Philadelphia, Pa..	11.55 A.M.
Cincinnati, O	11.18 A.M.	Pittsburg, Pa.....	11.36 A.M.
Cleveland, O.....	11.29 A.M.	Pittsfield, Mass...	12.02 P.M.
Columbus, O	11.24 A.M.	Portland, Me.....	12.15 P.M.
Concord, N. H ...	12.10 P.M.	Poughkeepsie, N.Y	12.00 M.
Council Bluffs, Ia..	10.34 A.M.	Providence, R.I..	12.10 P.M.
Davenport, Iowa..	10.53 A.M.	Richmond, Va....	11.46 A.M.
Dayton, O	11.19 A.M.	Rochester, N. Y..	11.43 A.M
Denver, Col.T.....	9.57 A.M.	Sacramento, Cal..	8.50 A.M.
Des Moines, Iowa	10.42 A.M.	St. Louis, Mo	10.55 A.M.
Detroit, Mich.....	11.24 A.M.	St. Paul, Minn....	10.44 A.M.
Dubuque, Iowa....	10.54 A.M.	Salt Lake City, Utah'.....	9.28 A.M.
Easton, Pa.....	11.55 A.M.	San Antonio, Tex.	10.23 A.M.
Elmira, N. Y.....	11.49 A.M.	San Francisco, Cal.	8.46 A.M.
Evansville, Ind....	11.07 A.M.	Savannah, Ga. ...	11.32 A.M.
Fort Wayne, Ind..	11.15 A.M.	Springfield, Ill	10.58 A.M.
Galveston, Tex....	10.37 A.M.	Springfield, Mass.	12.05 P.M.
Harrisburg, Pa....	11.49 A.M.	Syracuse, N.Y....	11.51 A.M.
Hartford, Conn....	12.05 P.M.	Terre Haute, Ind.	11.07 A.M.
Indianapolis, Ind..	11.12 P.M.	Toledo, O.....	11.22 A.M.
Kansas City, Mo...	10.37 A.M.	Trenton, N. J.....	11.54 A.M.
Keokuk, Iowa	10.50 A.M.	Troy, N. Y.....	11.58 A.M.
Leavenworth, Kan.	10.37 A.M.	Utica, N. Y.....	11.56 A.M.
Little Rock, Ark..	10.47 A.M.	Vicksburg, Miss..	10.53 A.M.
Louisville, Ky....	11.14 A.M.	Washington, D.C.	11.48 A.M.
Lowell, Mass	12.10 P.M.	Wheeling, W. Va.	11.33 A.M.
Memphis, Tenn....	10.55 A.M.	Wilmington, Del.	11.54 A.M.
Milwaukee, Wis...	11.05 A.M.	Worcester, Mass..	12.10 P.M.
Mobile, Ala.....	11.04 A.M.		
Montgomery, Ala..	11.10 A.M.		

NUMBER OF TACKS TO THE POUND.

Name.	*Length.*	*No.*	*Name.*	*Length.*	*No.*
1 oz.....	½ inch.....	16,000	10 oz.....	11-16 inch.....	1,600
1½ "	3-16 "	10,666	13 "	¾ "	1,333
2 "	¼ "	8,000	14 "	13-16 "	1,143
2½ "	5-16 "	6,400	16 "	⅞ "	1,000
3 "	⅜ "	5,333	18 "	15-16 "	888
4 "	7-16 "	4,000	20 "	1 "	800
6 "	9-16 "	2,666	22 "	11-16 "	727
8 "	⅝ "	2,000	24 "	1⅛ "	666

NUMBER OF NAILS TO THE POUND.

Name.	Size.	No.	Name.	Size.	No.
3 penny, fine	1⅛ inch	760 nails.	16 penny, ...	3½ inch	32 nails.
3 "	1¼ "	480 "	20 "	4 "	24 "
4 "	1½ "	300 "	30 "	4¼ "	18 "
5 "	1¾ "	200 "	40 "	5 "	14 "
6 "	2 "	160 "	50 "	5½ "	12 "
7 "	2¼ "	128 "	6 " fence	2 "	80 "
8 "	2½ "	92 "	8 " "	2½ "	50 "
9 "	2¾ "	72 "	10 " "	3 "	34 "
10 "	3 "	60 "	12 " "	3¼ "	29 "
12 "	3¼ "	44 "			

TIME AT WHICH MONEY DOUBLES AT INTEREST.

Per Cent.	Simple Interest.	Compound Interest.
2	50 years.	35 years 2 days.
2½	40 years.	28 years 26 days.
3	33 years 4 months.	23 years 164 days.
3½	28 years 208 days.	20 years 54 days.
4	25 years.	17 years 246 days.
4½	22 years 81 days.	15 years 273 days.
5	20 years.	15 years 75 days.
6	16 years 8 months.	11 years 328 days.
7	14 years 105 days.	10 years 89 days
8	12½ years.	9 years 2 days.
9	11 years 40 days.	8 years 16 days.
10	10 years.	7 years 100 days.

WAGES PAID IN EUROPE AND UNITED STATES.

—Comparative rates of weekly wages paid in Europe and in the United States in 1884. The wages paid in the United States vary, diminishing in the East and South and increasing at the West and North-west.

	Belgium.	Denmark.	France.	Germany.	Italy.	Great Britain.	U. S. Chicago.
	$	$	$	$	$	$	$
Bakers	4 40	4 25	5 55	3 50	3 90	6 50– 5 60	8– 12
Blacksmiths	4 40	3 90	5 45	3 55	3 94	7 04– 8 12	9– 12
Bookbinders	.....	3 72	4 85	3 82	3 90	6 50– 7 83	9– 20
Bricklayers	6 00	.....	4 00	3 60	3 45	7 58– 9 03	6– 10½
Cabinetmakers	4 80	.....	6 00	3 97	4 95	7 70– 8 48	7– 15
Carpenters and Joiners	5 40	4 25	5 42	4 00	4 18	7 33– 8 25	7½–12
Farm laborers	.....	.....	3 15	2 87	3 50	3 40– 4 25	... ...
Laborers, etc	3 00	.....	.....	2 92	2 60	4 50– 5 00	5½– 9
Painters	4 20	4 15	4 90	3 92	4 60	7 25– 8 16	6– 12
Plasteres	5 40	.....	.....	3 80	4 35	7 68–10 13	9– 15
Plumbers	6 00	.....	5 50	3 60	3 90	7 13– 8 46	12– 20
Printers	.....	4 62	4 70	4 80	3 90	7 52– 7 75	12– 18
Shoemakers	.....	3 30	4 75	3 12	4 32	– 7 35	9– 18
Tailors	.....	4 10	5 10	3 58	4 30	5 00– 7 30	6– 18
Tinsmiths	4 80	3 90	4 40	3 65	3 60	6 00– 7 30	9– 12

PRICES OF THE NECESSARIES OF LIFE in Europe and the United States.

	Belgium.	France.	Germany.	Italy.	Great Britain.	Chicago.
	Cts.	*Cts.*	*Cts.*	*Cts.*	*Cts.*	*Cts.*
Beef—roast.....lb	20	22	22	26	22	8-12½
Corned...lb	16	16	13	12	18-20	4- 7
Beans.....qt	.....	.....	10	13	9	5- 9
Bread.....lb	4- 5	3	3-7	6	3½- 4½	4- 4½
Butter.....lb	20-50	25	22	23	29 38	16-40
Coal.....ton	.....	.....	$4 25	$11 0	$2 65-$4 10	$3-6 75
Codfish .....lb	.....	.....	.....	9	6- 8	5- 9
Coffee.....lb	30-40	30	35	22	28-50	16-40
Eggs .....doz	20-25	18	20	18	1[illegible]-30	10-24
Flour.....lb	....	4	5½	10	3½- 4½	2½-4½
Lard.....lb	20	20	21	22	12-18	6-10
Milk.....qt	.....	.....	4	7	5- 9	3- 6
Mutton fore qr..lb	16	16	14½	15	16-17	5-12½
Oatmeal.....lb	....	.....	8	.....	3½- 4½	4- 5
Pork, fresh.....lb	16	14	17	13	10-16	4- 5
" salted.....lb	16	14	17	18	10-16	6-12
" bacon..lb	18	20	20	22	12-16	7-12
" sausage...lb	20	16	19	20	18	6-10
Potatoes.....bu	56	50	50	$ 1 15	68-$2 00	60-80
Rice.....lb	.....	.....	9	6	3½- 8	5-10
Soap.....lb	.....	.....	10	4	5½- 9	3- 8
Sugar.....lb	15-20	.....	11	8½	5½-10	7-10
Tea.....lb	.....	.....	75	.....	40-88	25-$1.00

FASTEST TRANSATLANTIC TIME ON RECORD.—The time of passage given in the table below represents the quickest ocean trips on record. It will be seen that we are gaining in speed.

	Mls	Steamer.	Date.	D. H. M.
New York to Queenstown	2,950	Oregon.....	July, 1884	6 6 52
New York to Queenstown	2,950	Arizona.....	Sep., 188	7 7 48
New York to Queenstown	2,950	Arizona.....	June 187[illegible]	7 9 23
New York to Queenstown	2,950	Britannic.....	Dec., 187[illegible]	7 12 46
New York to Queenstown	2,950	City of Berlin	Oct., 187	7 15 48
Queenstown to New York	2,9 0	City of Berlin.	Sep., 1875	7 18 02
New York to Queenstown	2,950	Russia.....	July, 1869	8 6 30
Queenstown to New York	2,950	Russia.....	June 869	8 2 58
New York to Queenstown	2,950	Russia.....	1869	9 8 12
Philadelphia to Queenst'n	3,050	Illinois.....	Dec., 1876	8 18 13
New York to Havana...	1,225	C'y Vera Cruz.	Aug. 1876	4 0 43
Havana to New York ...	1,225	Cityof N.Y'rk.	May, 1875	3 10 7
New York to Aspinwall..	2,3 0	Hy. Chauncey	1875	6 14 ..
Aspinwall to New York..	2,300	Hy. Chauncey	1875	6 5 30
S. Francisco to Yokohama	4,764	City of Peking.	..... —	15 9 ..
Yokohama to S. Francisco	4,764	Oceanic.....	1876	14 13 .
Queenstown to New York	2,950	Etruria.....	Aug. 1885	6 5 31

CONTENTS OF LOGS IN BOARD MEASURE will be found in the following table. If the log is longer than is contained in the table add together the contents of two logs making up the required length. The first column on the left gives the length of the log in feet. The figures under D denote the diameters of the logs in inches. Fractional parts of inches are not given. The diameter is taken at the top, or small end. To find the number of feet of boards which a log will produce when sawed, take the length of feet in the first column on the left hand and the diameter at the top of the page in inches. Allowance must be made for very crooked logs.

Length of Log.	D. 12	D. 13	D. 14	D. 15	D. 16	D. 17	D. 18	D. 19	D. 20	D. 21	D. 22	D. 23	D. 24
10 feet...	54	66	76	93	0	107	137	154	179	194	210	237	256
11 " ...	59	72	83	102	114	131	151	169	196	213	231	261	270
12 " ...	64	78	90	111	124	143	164	184	213	232	252	285	300
13 " ...	69	84	97	120	134	154	177	199	231	251	273	308	327
14 " ...	74	90	104	129	144	166	191	214	249	270	293	332	350
15 " ...	79	96	111	138	154	177	204	229	266	289	314	355	376
16 " ...	84	102	118	146	164	189	217	244	284	308	335	379	401
17 " ...	89	108	126	155	173	200	231	259	301	327	356	402	426
18 " ...	94	114	133	164	183	212	244	274	319	346	377	426	451
19 " ...	99	121	140	173	193	223	257	287	336	365	398	447	477
20 " ...	104	127	147	182	203	236	271	304	354	384	419	473	501
21 " ...	109	133	154	191	213	247	284	319	371	403	440	497	527
22 " ...	114	139	161	200	223	259	297	334	389	422	461	520	552
23 " ...	119	145	168	209	233	270	311	349	407	441	481	542	568
24 " ...	124	151	176	218	243	282	325	364	424	460	502	568	613
25 " ...	129	157	183	227	253	293	337	379	442	479	523	591	628
26 " ...	134	163	190	236	263	305	350	394	459	498	544	615	653
27 " ...	139	169	197	245	273	316	363	409	477	517	565	639	678
28 " ...	144	175	204	254	283	328	376	424	494	536	586	663	703
29 " ...	149	181	211	263	293	339	389	439	512	555	607	687	728
30 " ...	154	187	218	272	303	351	402	454	529	574	628	711	753
31 " ...	159	193	225	281	313	362	415	469	547	593	649	735	778

	D. 25	D. 26	D. 27	D. 28	D. 29	D. 30	D. 31	D. 32	D. 33	D. 34	D. 35	D. 36
10 feet...	283	309	339	359	377	407	440	456	486	496	543	573
11 " ...	311	340	374	396	415	447	484	502	535	546	598	630
12 " ...	340	371	408	432	453	489	528	548	584	596	653	688
13 " ...	369	404	442	469	491	530	572	594	633	646	708	746
14 " ...	397	435	476	505	529	571	618	640	682	696	762	803
15 " ...	426	465	511	541	567	612	662	686	731	746	817	861
16 " ...	455	496	545	578	605	653	706	732	780	796	872	919
17 " ...	483	527	579	614	643	694	751	778	829	846	927	976
18 " ...	512	558	613	650	681	735	795	824	878	896	981	1034
19 " ...	541	590	647	688	719	776	839	870	927	946	1036	1092
20 " ...	569	621	681	724	757	817	884	916	976	996	1091	1148
21 " ...	598	652	716	760	796	859	928	962	1025	1046	1146	1206
22 " ...	627	684	750	796	834	900	972	1008	1074	1096	1200	1264
23 " ...	655	715	784	833	872	941	1017	1054	1123	1146	1255	1318
24 " ...	684	746	818	889	910	982	1061	1100	1172	1196	1310	1376
25 " ...	713	777	853	905	948	1023	1105	1146	1221	1246	1365	1434
26 " ...	742	808	887	942	986	1064	1149	1192	1270	1296	1420	1492
27 " ...	771	839	921	979	1024	1105	1193	1238	1319	1346	1475	1550
28 " ...	800	870	955	1015	1062	1146	1237	1284	1368	1396	1530	1608
29 " ...	829	901	989	1052	1100	1187	1281	1330	14 7	1446	1585	1666
30 " ...	858	932	1023	1088	1138	1228	1325	1376	1 66	1496	1640	1724
31 " ...	887	963	1057	1125	1176	1269	1369	1422	5 5	1546	1695	1782

TO FIND THE CONTENTS OF ANY LOG.—Add together the two extreme diameters, and divide by 2 for the mean diameter. Subtract one-third for the side of the square the log will make when hewn. Square the side thus obtained, and multiply the product by the length of the log in feet, and divide the last product by 144 (or by 12 twice), the quotient will be the cubical contents in feet, and twelfths of a foot.

SHRINKAGE OF GRAIN.—Wheat from the time it is threshed will shrink 7 per cent in six months, under the most favorable circumstances. Corn shrinks much more from the time it is husked, averaging about 20 per cent during the first six months. In the case of potatoes—taking those that rot and are otherwise lost—together with the shrinkage, there is but little doubt that between October and June the loss to the owner who holds them is not less than 30 per cent.

BOARD AND PLANK MEASUREMENT—AT SIGHT.—This table gives the sq. ft. and in. in board from 6 to 25 in. wide, and from 8 to 36 ft. long. If a board be longer than 36 ft., unite two numbers. Thus, if a board is 40 ft. long and 16 in. wide, add 30 and 10, and you have 53 ft. 4 in. For 2-in. plank double the product.

To find the contents of any piece thicker than one inch, multiply the contents of a similar piece one inch thick as given in the table, by the thickness in inches. All stuff less than one inch thick is counted as an inch thick.

Feet Long.	6 in. W.		7 in. W.		8 in. W.		9 in. W.		10 in. W.		11 in. W.		12 in. W.		13 in. W.		14 in. W.		15 in. W.	
	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
8...	4	0	4	8	5	4	6	0	6	8	7	4	8	0	8	8	9	4	10	0
9...	4	6	5	3	6	0	6	9	7	6	8	3	9	0	9	9	10	6	11	3
10...	5	0	5	10	6	8	7	6	8	4	9	2	10	0	10	10	11	8	12	6
11...	5	6	6	5	7	4	8	3	9	2	10	1	11	0	11	11	12	10	12	9
12...	6	0	7	0	8	0	9	0	10	0	11	0	12	0	13	0	14	0	15	0
13...	6	6	7	7	8	8	9	9	10	10	11	11	13	0	14	1	15	2	16	3
14...	7	0	8	2	9	4	10	6	11	8	12	10	14	0	15	2	16	4	17	6
15...	7	6	8	9	10	0	11	3	12	6	13	9	15	0	16	3	17	6	18	9
16...	8	0	9	4	10	8	12	0	13	4	14	8	16	0	17	4	18	8	20	0
17...	8	6	9	11	11	4	12	9	14	2	15	7	17	0	18	5	19	10	21	3
18...	9	0	10	6	12	0	13	6	15	0	16	6	18	0	19	6	21	0	22	6
19...	9	6	11	1	12	8	14	3	15	10	17	5	19	0	20	7	22	2	23	9
20...	10	0	11	8	13	4	15	0	16	8	18	4	20	0	21	8	23	4	25	0
21...	10	6	12	3	14	0	15	9	17	6	19	3	21	0	22	9	24	6	26	3
22...	11	0	12	10	14	8	16	6	18	4	20	2	22	0	23	10	25	8	27	6
23...	11	6	13	5	15	4	17	3	19	2	21	1	23	0	24	11	26	10	28	9
24...	12	0	14	0	16	0	18	0	20	0	22	0	24	0	26	0	28	0	30	0
25...	12	6	14	7	16	8	18	9	20	10	22	11	25	0	27	1	29	2	31	3
26...	13	0	15	2	17	4	19	6	21	8	23	10	26	0	28	2	30	4	32	6
27...	13	6	15	9	18	0	20	3	22	6	24	9	27	0	29	3	31	6	33	9
28...	14	0	16	4	18	8	21	0	23	4	25	8	28	0	30	4	32	8	35	0
29...	14	6	16	11	19	4	21	9	24	2	26	7	29	0	31	5	33	10	36	3
30...	15	0	17	6	20	0	22	6	25	0	27	6	30	0	32	6	35	0	37	6
31...	15	6	18	1	20	8	23	3	25	10	28	5	31	0	33	7	36	2	38	9
32...	16	0	18	8	21	4	24	0	26	8	29	4	32	0	34	8	37	4	40	0
33...	16	6	19	3	22	0	24	9	27	6	30	3	33	0	35	9	38	6	41	3
34...	17	0	19	10	22	8	25	6	28	4	31	2	34	0	36	10	39	8	42	6
35...	17	6	20	5	23	4	26	3	29	2	32	1	35	0	37	11	40	10	43	9
36...	18	0	21	0	24	0	27	0	30	0	33	0	36	0	39	0	42	0	45	0

Feet Long.	16 in. W.		17 in. W.		18 in. W.		19 in. W.		20 in W.		21 in. W.		22 in. W.		23 in. W.		24 in. W.		25 in. W.	
	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.	ft.	in.
8...	10	8	11	4	12	0	12	8	13	4	14	0	14	8	15	4	16	0	16	8
9...	12	0	12	9	13	6	14	3	15	0	15	9	16	6	17	3	18	0	18	9
10...	13	4	14	2	15	0	15	10	16	8	17	6	18	4	19	2	20	0	20	10
11...	14	8	15	7	16	6	17	5	18	4	19	3	20	2	21	1	22	0	22	11
12...	16	0	17	0	18	0	19	0	20	0	21	0	22	0	23	0	24	0	25	0
13...	17	4	18	5	19	6	20	7	21	8	22	9	23	10	24	11	26	0	27	1
14...	18	8	19	10	21	0	22	2	23	4	24	6	25	8	26	10	28	0	29	2
15...	20	0	21	3	22	6	23	9	25	0	26	3	27	6	28	9	30	0	31	3
16...	21	4	22	8	24	0	25	4	26	8	28	0	29	4	30	8	32	0	33	4
17...	22	8	24	1	25	6	26	11	28	4	29	9	31	2	32	7	34	0	35	5
18...	24	0	25	6	27	0	28	6	30	0	31	6	33	0	34	6	36	0	37	6
19...	25	4	26	11	28	6	30	1	31	8	33	3	34	10	36	5	38	0	39	7
20...	26	8	28	4	30	0	31	8	33	4	35	0	36	8	38	4	40	0	41	8
21...	28	0	29	9	31	6	33	3	35	0	36	9	38	6	40	3	42	0	43	9
22...	29	4	31	2	33	0	34	10	36	8	38	6	40	4	42	2	44	0	45	10
23...	30	8	32	7	34	6	36	5	38	4	40	3	42	2	44	1	46	0	47	11
24...	33	0	34	0	36	0	38	0	40	0	42	0	44	0	46	0	48	0	50	0
25...	34	4	35	5	37	6	39	7	41	8	43	9	45	10	47	11	50	0	52	1
26...	35	8	36	10	39	0	41	2	43	4	45	6	47	8	49	10	52	0	54	2
27...	36	0	38	3	40	6	42	9	45	0	47	3	49	6	51	9	54	0	56	3
28...	37	4	39	8	42	0	44	4	46	8	49	0	51	4	53	8	56	0	58	4
29...	38	8	41	1	43	6	45	11	48	4	50	9	53	2	55	7	58	0	60	5
30...	40	0	42	6	45	0	47	6	50	0	51	6	55	0	57	6	60	0	62	6

A COON HUNT

FACTS FOR BUILDERS.—One thousand shingles laid four inches to the weather will cover over 100 square feet of surface, and five pounds of shingle nails will fasten them on.

One-fifth more siding and flooring is needed than the number of square feet of surface to be covered, because of the lap in the siding and matching of the floor.

One thousand laths will cover 70 yards of surface, and 11 pounds of lath nails will nail them on.

Eight bushels of good lime, 16 bushels of sand and 1 bushel of hair will make enough mortar to plaster 100 square yards.

A cord of stone, 3 bushels of lime and a cubic yard of sand will lay 100 cubic feet of wall.

Five courses of brick will lay 1 foot in height on a chimney, 9 bricks in a course will make a flue 8 inches wide and 20 inches long, and 8 bricks in a course will make a flue 8 inches wide and 16 inches long.

A cask of lime will make into mortar sufficient, commonly, for from 1,000 to 1,100 bricks; 1,000 may be considered a safe estimate.

Sand is estimated by the load, a load containing from 19 to 21 bushels. This is sufficient for about 2 casks of lime; therefore we may estimate 1 cask of lime to 10 bushels of sand.

WHITEWASH.—Make the whitewash in the ordinary manner, then place it over a fire and bring it to a boil; then stir into each gallon a tablespoonful of powdered alum, a half pint of good flour paste, and half a pound of glue dissolved in water, while it is boiling.

RELATIVE HARDNESS OF WOODS.—Taking shell bark as the highest standard of our forest trees, and calling that 100, other trees will compare with it as follows:

Shell Bark Hickory	100	Yellow Oak	60
Pignut Hickory	96	White Elm	58
White Oak	84	Hard Maple	56
White Ash	77	Red Cedar	56
Dogwood	75	Wild Cherry	55
Scrub Oak	73	Yellow Pine	54
White Hazel	72	Chestnut	52
Apple Tree	70	Yellow Poplar	51
Red Oak	60	Butternut	43
White Beech	65	White Birch	43
Black Walnut	65	White Pine	30
Black Birch	62		

BIBLE FACTS.—The first translation of the Bible was the celebrated Greek version of the Old Testament, called the Septuagint, made B.C. 285. The meaning of the title is seventy, and was bestowed upon the word because of the approval of the version by the Sanhedrim, the highest Jewish tribunal, composed of seventy-one members. The first English translation was John Wycliffe's, from the Latin, about 1382. The first printed English version of the New Testament was William Tyndal's translation from the original in 1525. First Bible (complete) printed in English, was Miles Coverdale's, 1535. The first English version printed in Roman letters was the "Geneva Bible," by a company of English exiles in 1560,—in general use about 60 years. The common translation in use for the last 274 years, is "King James" version, by 54 divines, issued *at his command* in 1611, after seven years labor upon it. The New Revised Edition of the Bible, of which the New Testament was published May 17, 1881, was prepared, and laboriously finished, by 52 English divines, appointed in May, 1870, and 30 American, appointed in 1871. Since 1800, the English and American Societies have printed of the

Protestant version of the Bible or New Testament, over 125,000,000 copies. The Bible is now printed in 226 different languages and dialects. The total number of languages and dialects spoken throughout the world is about 915. The Bible contains 3,566,480 letters, 773,746 words, 31,173 verses, 1,189 chapters, and 66 books. The word and occurs 46,277 times. The word Lord occurs 1,855 times. The word reverend occurs but once, which is in the 9th verse of the 111th Psalm. The middle verse is the 8th verse of the 118th Psalm. The 21st verse of the 7th chapter of Ezra contains all the letters of the alphabet except the letter J. The 19th chapter of of II Kings and the 37th chapter of Isaiah are alike. The longest verse is the 9th verse of the 8th chapter of Esther. The shortest verse is the 35th verse of the 11th chapter of St. John. There are no words or names of more than six syllables.

SHORT RULES FOR CASTING INTEREST.

For finding the interest on any principal for any number of days, the answer in each case being in cents. Separate the two right hand figures to express it in dollars and cents.

Four Per Cent.—Multiply the principal by the number of days to run; separate the right hand figure from the product, and divide by 9.

Five Per Cent.—Multiply by number of days and divide by 72.

Six Per Cent.—Multiply by number of days; separate right hand figure, and divide by 6.

Seven Per Cent.—To find the interest on any sum at 7 per cent, take the interest given by the tables at 6 per cent., add one-sixth to that amount, and you have the interest at 7 per cent.

Eight Per Cent.—Multiply by number of days and divide by 45.

Nine Per Cent.—Multiply by number of days; separate right hand figure and divide by 4.

Ten Per Cent. — Multiply by number of days and divide by 36.

Twelve Per Cent.—Multiply by number of days; separate right hand figure and divide by 3.

Fifteen Per Cent.—Multiply by number of days and divide by 24.

Eighteen Per Cent —Multiply by number of days; separate right hand figure and divide by 2.

Twenty Per Cent.—Multiply by number of days and divide by 18.

A short way for reckoning interest on odd days, at any rate per cent, is as follows: Multiply the principal by the number of days, and for 6 per cent. divide by 60; for 7 per cent, by 51; for 8 per cent, by 40; for 10 per cent, by 36; for 12 per cent, by 30.

POWER REQUIRED TO GRIND GRAIN WITH PORTABLE MILLS.

Horse power.	Size of stones.	Revolutions per minute.	Bush. Corn per hour.	Bush. Wheat per hour.
2 to 5	12 inch.	800 to 900	1 to 4	1 to 3
5 to 8	20 "	650 to 700	5 to 8	4 to 6
8 to 11	30 "	550 to 600	10 to 15	7 to 10
12 to 18	36 "	450 to 500	18 to 25	12 to 15
20 to 30	48 "	350 to 400	25 to 35	15 to 18

TO STOP SQUEAKING SHOES drive a peg in the center of the sole.

OATMEAL.—It takes about 12 bushels of oats to make a barrel of 200 lbs. of oatmeal; another rating estimates that 14 lbs. of oats produces 8 lbs. of oat meal.

One Bushel of buckwheat, or 50 lbs., will produce 25 lbs. of buckwheat meal; more may be obtained, but the quality will be impaired.

One Bushel of good wheat (60 lbs.) is estimated to make 40 lbs. of flour; *i. e.*, 2½ bushels of wheat for 100 lbs. of flour.

SUN DIAL—HOW MADE.—Upon a level, hard surface, describe with compasses, a circle eight or ten inches in diameter. Drive a piece of heavy wire, six or eight inches long, perpendicularly in the center, leaving it just high enough to allow the extreme end of the shadow to fall upon the circle about 9:30 or 10 o'clock. Mark this point and the point where the end of the shadow touches the circle in the afternoon. Draw a line from a point exactly half-way between the two to the center of the circle. This line will be the meridian line or noon mark. The dial should be made either April 15, June 15, September 1, or December 24, as on these four days, and no other, the noon-mark or sun-dial will coincide with 12 o'clock.

SQUARING THE CIRCLE.—One-half of the diameter multipled by the diameter or seven-elevenths of the area of the circle, will give the area of an inscribed square. To find the side of an inscribed square, multiply one-fourth of the circumference by nine. When the circumference is given, to find the diameter, multiply by seven and divide by twenty-two. Eleven-fourteenths of the diameter gives exactly one-fourth of the circumference. The above solution is mathematically true.

PROPORTIONATE PROPERTIES OF FOOD:

One hundred parts of each.	*Water, etc.*	*Muscle making.*	*Heat and Fat making.*
Apples	84.0	5.0	10.0
Barley	14.0	15.0	68.8
Beans	14.8	24.0	57.7
Beef	50.0	15.0	30.0
Buckwheat	14.2	8.6	75.4
Butter	....	....	all.
Cabbage	90.0	4.0	5.0
Cheese	10.0	65.0	19.0
Chicken	46.0	18.0	32.0
Corn	14.0	12.0	73.0
Cucumbers	97.0	1.5	1.0
Eggs, white of	53.0	17.0	none.
Eggs, yelk of	79.0	15.0	27.0
Lamb	50.5	11.0	35.0
Milk—cow's	86.0	5.0	8.0
Mutton	44.0	12.5	40.0
Oats	13.6	17.0	66.4
Peas	14.0	23.4	60.0
Pork	38.5	10.0	50.0
Potatoes	75.2	1.4	22.5
Rice	13.5	6.5	79.5
Turnips	94.4	1.1	4.0
Veal	68.5	10.1	16.5
Wheat	14.0	14.6	69.4

A SUPERIOR LINIMENT for man or beast is composed of equal parts of laudanum, alcohol and oil of wormwood.

ROPE.—Table showing what weights hemp rope will bear with safety.

Circumference.	Pounds.	Circumference.	Pounds.
1 inch.	200	3 inch.	1,800
1¼ "	312.5	3¼ "	2,112.5
1½ "	450	3½ "	2,450
1¾ "	612.5	3¾ "	2,812.5
2 "	800	4 "	3,200
2¼ "	1,012.5	5 "	5,000
2½ "	1,250	6 "	7,200
2¾ "	1,512.5		

A square inch of hemp fibers will support a weight of 9,200 pounds. The maximum strength of a good hemp rope is 6,400 pounds to the square inch. Its practical value is not more than one-half this strain. Before breaking, it stretches from one-fifth to one-seventh, and its diameter diminishes one-fourth to one-seventh. The strength of manilla is about one-half that of hemp. White ropes are one-third more durable. Wire rope is about two and one-eighth times as strong as hemp rope.

INTERESTING FACTS.

There are 2,750 languages.
America was discovered in 1492.
A square mile contains 640 acres.
Envelopes were first used in 1839.
Telescopes were invented in 1590.
A barrel of rice weighs 600 pounds.
A barrel of flour weighs 196 pounds.
A barrel of pork weighs 200 pounds.
A firkin of butter weighs 56 pounds.
The first steel pen was made in 1830.
A span is ten and seven-eighths inches.
A hand (horse measure) is four inches.
Watches were first constructed in 1476.
A storm moves thirty-six miles per hour.
A hurricane moves eighty miles per hour.
The first iron steamship was built in 1830.
The first lucifer match was made in 1829.
Gold was discovered in California in 1848.
The first horse railroad was built in 1826-7.
The average human life is thirty-three years.
Coaches were first used in England in 1569.
Modern needles first came into use in 1545.
Kerosene was first used for lighting purposes in 1826.
The first newspaper was published in England in 1588.
The first newspaper advertisement appeared in 1652.
Glass windows were first introduced into England in the eighth century.
Albert Durer gave the world a prophecy of future wood engraving in 1527.
Measure 209 feet on each side and you will have a square acre within an inch.
The first complete sewing machine was patented by Elias Howe, Jr., in 1848.
The first steam engine on this continent was brought from England in 1753
The first knives were used in England, and the first wheeled carriage in France in 1559.
The present national colors of the United States were not adopted by congress until 1777.

BUSINESS LAW.

Ignorance of the law excuses no one.
An agreement without consideration is void.
Signatures made with a lead pencil are good in law.
A receipt for money paid is not legally conclusive.
The acts of one partner bind all the others.
Contracts made on Sunday cannot be enforced.
A contract made with a minor or a lunatic is void.
Principals are responsible for the acts of their agents.
Agents are responsible to their principals for errors.
Each individual in a partnership is responsible for the whole amount of the debt of the firm.
A note given by a minor is void.
Notes bear interest only when so stated.
It is not legally necessary to say on a note "for value received."
A note drawn on Sunday is void.
A note obtained by fraud, or from a person in a state of intoxication, cannot be collected.
If a note be lost or stolen, it does not release the maker; he must pay it.
An indorser of a note is exempt from liability if not served with notice of its dishonor within twenty-four hours of its non-payment
It is a fraud to conceal a fraud.
The law compels no one to do impossibilities.
A personal right of action dies with the person.
In making agreements, consider not only your *rights*, but also what are your *remedies*.

THE FASTEST RAILROAD TIME yet made is 72 miles per hour.

SHRINKAGE IN DIMENSION OF TIMBER BY SEASONING.

Woods.	*Inches.*	*Woods.*	*Inches.*
Pitch pine, South	18⅜ to 18¼	Cedar, Canada	14 to 13¼
Spruce	8½ to 8⅜	Elm	11 to 10¾
White pine, Amer.	12 to 11⅞	Oak, English	12 to 11⅜
Yellow pine	18 to 17⅞	Pitch pine	10x10 to 9¾x9¾

THE TERM PENNY AS APPLIED TO NAILS.—The term penny as applied to nails is generally supposed to have been derived from pound. It originally meant so many pounds to the thousand; that is, six-penny means six pounds of nails to the thousand. The thousand was always understood, and six pound, ten pound, etc., were gradually shortened until the present term penny has entirely taken the place of pound.

AREAS OF CIRCLES.—The diameter of any circle, multiplied by 3.1416 equals the circumference. The circumference multiplied by .31831 equals the diameter. The square of the diameter, multiplied by .7854 equals the area. The square of circumference, multiplied by .07958 equals the area.

TO MEASURE GRAIN IN THE BIN.—By the United States standard, 2,150 cubic inches make a bushel; a cubic foot contains 1,728 cubic inches. Rule—Multiply the number of feet wide of bin, by the length, the result by the depth, then divide the product by 5 and multiply the quotient by 4, which number will give the quantity in bushels.

EMERGENCIES.

Apoplexy.—Elevate head and body, apply cold to head and nape of neck, and heat to feet and stomach.

Epileptic Fit.—Lay patient on the back, with little or no elevation of head, keep off the sun, prevent from self-injury, put cloth between teeth to prevent biting tongue; when convulsion subsides, keep patient quiet.

Fainting.—Lay patient down, head as low as possible, loosen clothing, keep back crowd, admit fresh air, sprinkle water on face, apply ammonia to nostrils till revived.

If an artery is severed (bright red blood, in spurts), compress between wound and heart. If a vein be broken (dark blood, steady flow), compress away from heart.

Sore Throat or Diphtheria.—Gargle lemon juice and swallow a portion; or salt and water, or tincture of iron (mild).

Bruises.—Bathe with cold water till pain is allayed, then use warm water to take away discoloration.

Poisoning.—In all ordinary cases, especially if cause is unknown, give an emetic, consisting of a teaspoonful each of salt and mustard in a glass of warm (not hot) water, and send for a physician or druggist. After vomiting, the effect may be overcome by swallowing the whites of two or three eggs and drinking a cup or two of strong coffee. Sweet oil, taken freely, is excellent in cases of poisoning. Suck poisoned wounds, unless mouth is sore, and for snake bites give whisky till its influence is felt. For bites of insects apply diluted ammonia to wound.

TABLE showing the altitudes above the sea-level of various places in the United States.

	Feet.		*Feet.*
Portland, Me	187	Cleveland, Ohio	643
Concord, N. H	374	Detroit, Mich	597
Mt. Washington	6,293	Ann Arbor, Mich	891
Rutland, Vt	500	Indianapolis, Ind	698
Boston, Mass	82	Chicago, Ill	591
Albany, N. Y	75	Elgin, Ill	777
New York, N. Y	60	Winnebago, Ill	900
Buffalo, N. Y	585	Milwaukee, Wis	591
Philadelphia, Pa	60	Baraboo, Wis	800
Somerset, Pa	2,195	St. Anthony Falls, Minn	820
Pittsburgh, Pa	937	New Ulm, Minn	1,500
Baltimore, Md	275	Dubuque, Ia	666
Washington, D. C	90	Rossville, Ia	1,400
Charleston, S. C	25	Sioux City, Ia	1,258
Key West, Florida	10	St. Louis, Mo	481
Hillsboro, Ga	800	Omaha, Neb	1,300
Vicksburg, Miss	350	Ionia, Neb	3,000
New Orleans, La	10	Lawrence, Kan	800
Corpus Christi, Tex	20	Fort Larned, Kan	1,932
El Paso, Tex	3,830	Fort Phil Kearney, Wy	6,000
Knoxville, Tenn	1,000	Cheyenne, Wy	6,041
Cumberland Mt., Tenn	2,000	Yankton, Dak	1,900
Little Rock, Ark	660	Fort Garland, Col	8,365
Louisville, Ky	450	Helena, Mont	4,150
Cincinnati, O	480	Fort Marcy, N. M	6,846
Upper Portion of City	588	Salt Lake City, Utah	4,320
Ft. Mohave, Arizona	604	Hot Springs, Nev	4,098
San Francisco, Cal	130	Sacramento, Cal	82

A READY REFERENCE CALENDAR.

For ascertaining any Day of the Week for any given Time within Two Hundred Years from the introduction of the New Style, 1752 to 1952 inclusive.

YEARS 1753 TO 1952.	JAN.	FEB.	MAR.	APRIL	MAY	JUNE	JULY	AUG.	SEPT.	OCT.	NOV.	DEC.
1761 1767 1778 1789 1795												
1801 1807 1818 1829 1835 1846 1857 1863 1874 1885 1891	4	7	7	3	5	1	3	6	2	4	7	2
1903 1914 1925 1931 1942												
1762 1773 1779 1790												
1802 1813 1819 1830 1841 1847 1858 1869 1875 1886 1897	5	1	1	4	6	2	4	7	3	5	1	3
1909 1915 1926 1937 1943												
1757 1763 1774 1785 1791												
1803 1814 1825 1831 1842 1853 1859 1870 1881 1887 1898	6	2	2	5	7	3	5	1	4	6	2	4
1910 1921 1927 1938 1949												
1754 1765 1771 1782 1793 1799												
1805 1811 1822 1833 1839 1850 1861 1867 1878 1889 1895	2	5	5	1	3	6	1	4	7	2	5	7
1901 1907 1918 1929 1935 1946												
1755 1766 1777 1783 1794 1800												
1806 1817 1823 1834 1845 1851 1862 1873 1879 1890	3	6	6	2	4	7	2	5	1	3	6	1
1902 1913 1919 1930 1941 1947												
1758 1769 1775 1786 1797												
1809 1815 1826 1837 1843 1854 1865 1871 1882 1893 1899	7	3	3	6	1	4	6	2	5	7	3	5
1905 1911 1922 1933 1939 1950												
1753 1759 1770 1781 1787 1798												
1810 1821 1827 1838 1849 1855 1866 1877 1883 1894 1900	1	4	4	7	2	5	7	3	6	1	4	6
1906 1917 1923 1934 1945												
1951												

1	2	3	4
Monday 1	Tuesday 1	Wednesd. 1	Thursday 1
Tuesday 2	Wednesd. 2	Thursday 2	Friday 2
Wednesd. 3	Thursday 3	Friday 3	Saturday 3
Thursday 4	Friday 4	Saturday 4	*Sunday* 4
Friday 5	Saturday 5	*Sunday* 5	Monday 5
Saturday 6	*Sunday* 6	Monday 6	Tuesday 6
Sunday 7	Monday 7	Tuesday 7	Wednesd. 7
Monday 8	Tuesday 8	Wednesd. 8	Thursday 8
Tuesday 9	Wednesd. 9	Thursday 9	Friday 9
Wednes. 10	Thursd. 10	Friday 10	Saturday 10
Thursd. 11	Friday 11	Saturday 11	*Sunday* 11
Friday 12	Saturday 12	*Sunday* 12	Monday 12
Saturday 13	*Sunday* 13	Monday 13	Tuesday 13
Sunday 14	Monday 14	Tuesday 14	Wednes. 14
Monday 15	Tuesday 15	Wednes. 15	Thurs. 15
Tuesday 16	Wednes. 16	Thurs. 16	Friday 16
Wednes. 17	Thurs. 17	Friday 17	Saturday 17
Thursd. 18	Friday 18	Saturday 18	*Sunday* 18
Friday 19	Saturday 19	*Sunday* 19	Monday 19
Saturday 20	*Sunday* 20	Monday 20	Tuesday 20
Sunday 21	Monday 21	Tuesday 21	Wednes. 21
Monday 22	Tuesday 22	Wednes 22	Thursd. 22
Tuesday 23	Wednes. 23	Thursd. 23	Friday 23
Wednes. 24	Thursd. 24	Friday 24	Saturday 24
Thursd. 25	Friday 25	Saturday 25	*Sunday* 25
Friday 26	Saturday 26	*Sunday* 26	Monday 26
Saturday 27	*Sunday* 27	Monday 27	Tuesday 27
Sunday 28	Monday 28	Tuesday 28	Wednes. 28
Monday 29	Tuesday 29	Wednes. 29	Thursd. 29
Tuesday 30	Wednes. 30	Thursd. 30	Friday 30
Wednes. 31	Thursd. 31	Friday 31	Saturday 31

READY REFERENCE CALENDAR.—Continued.

LEAP YEARS.								JAN.	FEB. 29	MARCH.	APRIL.	MAY.	JUNE.	JULY.	AUG.	SEPT.	OCT.	NOV.	DEC.
1764	1792	1804	1832	1860	1888	1928	....	7	3	4	7	2	5	7	3	6	1	4	6
1768	1796	1808	1836	1864	1892	1904	1932	5	1	2	5	7	3	5	1	4	6	2	4
1772	....	1812	1840	1868	1896	1908	1936	3	6	7	3	5	1	3	6	2	4	7	2
1776	....	1816	1844	1872	....	1912	1940	1	4	5	1	3	6	1	4	7	2	5	7
1780	....	1820	1848	1876	....	1916	1944	6	2	3	6	1	4	6	2	5	7	3	5
1756	1781	1824	1852	1880	....	1920	1948	4	7	1	4	6	2	4	7	3	5	1	3
1760	1788	1828	1856	1884	....	1924	1952	2	5	6	2	4	7	2	5	1	3	6	1

NOTE.—To ascertain any day of the week, first look in the table for the year required, and under the months are figures which refer to the corresponding figures at the head of the columns of days at the right. *For Example:* To know on what day of the week July 4 will be in the year 1888, in the table of the years look for 1888, and in a parallel line, under July, is fig. 7, which directs to column 7, of the columns of days, in which it will be seen that July 4, falls on Wednesday.

5		6		7	
Friday	1	Saturday	1	*Sunday*	1
Saturday	2	*Sunday*	2	Monday	2
Sunday	3	Monday	3	Tuesday	3
Monday	4	Tuesday	4	Wednesd.	4
Tuesday	5	Wednes.	5	Thurs.	5
Wednes.	6	Thurs.	6	Friday	6
Thursday	7	Friday	7	Saturday	7
Friday	8	Saturday	8	*Sunday*	8
Saturday	9	*Sunday*	9	Monday	9
Sunday	10	Monday	10	Tuesday	10
Monday	11	Tuesday	11	Wednes.	11
Tuesday	12	Wednes.	12	Thurs.	12
Wednes.	13	Thurs.	13	Friday	13
Thurs.	14	Friday	14	Saturday	14
Friday	15	Saturday	15	*Sunday*	15
Saturday	16	*Sunday*	16	Monday	16
Sunday	17	Monday	17	Tuesd.	17
Monday	18	Tuesd.	18	Wednes.	18
Tuesday	19	Wednes.	19	Thurs.	19
Wednes.	20	Thurs.	20	Friday	20
Thursd.	21	Friday	21	Saturday	21
Friday	22	Saturday	22	*Sunday*	22
Saturday	23	*Sunday*	23	Monday	23
Sunday	24	Monday	24	Tuesd.	24
Monday	25	Tuesd.	25	Wednes.	25
Tuesday	26	Wednes.	26	Thursd.	26
Wednes.	27	Thursd.	27	Friday	27
Thursd.	28	Friday	28	Saturday	28
Friday	29	Saturd.	29	*Sunday*	29
Saturday	30	*Sunday*	30	Monday	30
Sunday	31	Monday	31	Tuesday	31

MEN CALLED OUT DURING THE WAR.—The total number called for, under all calls made by the President, from April 15, 1861 to April 14, 1865, was 2,759,049. Their terms of service under the call were from three months to three years.

	Aggregate.		Aggregate.
New York	455,568	Maine	71,745
Pennsylvania	366,326	Connecticut	52,270
Ohio	317,133	Maryland	49,730
Illinois	258,217	Vermont	35,256
Indiana	195,147	New Hampshire	34,605
Massachusetts	151,785	West Virginia	30,003
Missouri	107,773	Minnesota	25,034
Wisconsin	96,118	Rhode Island	23,711
Michigan	90,119	Kansas	20,097
New Jersey	79,511	District of Columbia	16,872
Kentucky	78,540	Delaware	13,651
Iowa	75,860		
		Total	2,653,062

TO WRITE INSCRIPTIONS ON METALS.—Take half lb. of nitric acid and one oz. of muriatic acid. Mix, shake well together, and it is ready for use. Cover the place you wish to mark with melted beeswax; when cold, write your inscription plainly in the wax with a sharp instrument making it clear to the metal, then apply the mixed acids with a feather, carefully filling each letter. Let it remain from 1 to 10 minutes, according to appearance desired; then throw on water, which stops the process and removes the wax.

THE LAW OF FINDING.—The law of finding is that the finder has a clear title against everyone but the owner. The proprietor of a hotel or a shop has no right to demand the property because found on the premises. Such proprietor may make regulations in regard to lost property binding on their employes, but they cannot bind the public. The law of finding was declared by the King's bench over 100 years ago, in a case in which the facts were these:

A person found a wallet containiug a sum of money on a shop floor. He handed the wallet and contents to the shopkeeper to be returned to the owner. After three years, during which the owner did not call for his property, the finder demanded the wallet and the money from the shopkeeper. The latter refused to deliver them up on the ground that they were found on the premises. The former sued the shopkeeper, and it was held as above set forth, that against all the world but the owner the title of the finder is perfect. And the finder has been held to stand in the place of the owner, so that he was permitted to prevail in an action against a person who found an article which the plaintiff had originally found, but subsequently lost. The police have no special rights in regard to articles lost, unless those rights are conferred by statute. Receivers of articles found are trustees for the owner or finder. They have no power in the absence of special statute to keep an article against the finder, any more than the finder has to retain an article against the owner.

MARRIAGE AND DIVORCE LAWS IN THE U. S.

MARRIAGE LICENSES are required in all the States and Territories except Dakota, Montana, New Mexico, New Jersey and New York. In Maryland legal marriage can be had only by an ordained minister.

MARRIAGE PROHIBITED.—Marriages between whites and persons of negro descent are prohibited and punishable in California, Colorado, Delaware, Georgia, Florida, Kentucky, Maryland, Mississippi, Missouri, Nebraska, North Carolina, Oregon, South Carolina, Tennessee, Texas, Virginia and West Virginia. Marriages between whites and Inidans are prohibited in Arizona and North Carolina. Marriages between whites and Chinese are prohibited in Arizona. The marriage of first cousins is forbidden in Arkansas, Dakota, Indiana, Kansas, Montana, Nevada, New Mexico, Ohio, Washington Territory and Wyoming, and in some of them is declared incestuous and void.

MARRIAGE AGE.—In New Jersey and Ohio males under twenty-one years and females under eighteen years of age must obtain the consent of parents or guardians. In Massachusetts a marriage between a male over fourteen and a female over twelve is legal, even without the consent of parents.

MARRIAGE, PRESUMPTION OF.—In Missouri it has been held that where parties cohabit and represent themselves as husband and wife, a marriage is presumed, and when parties capable of contracting agree, in express terms, with each other, to be husband and wife, and cohabit as such, the marriage is valid, without any further ceremony being performed. In California marriage is declared a civil contract; consent, followed by a mutual assumption of martial rights and obligations, is sufficient.

ARCTIC EXPLORATIONS.—The most Northern point reached by the various Arctic expeditions is given below:

Year.	Explorers.	No.	Latitude.		
1607	Hudson	80d	23m	00s
1773	Phipps (Lord Musgrove)	80d	48m	00s
1806	Scoresby	81d	12m	42s
1827	Parry	82d	45m	30s
1874	Meyer (on land)	82d	09m	00s
1875	Markham (Nare's expedition)	83d	20m	26s
1876	Payer	83d	07m	00s
1884	Lockwood (Greely's party)	83d	24m	00s

The distance from the farthest point of polar discovery to the pole itself is 460 miles. But this polar radius, though only 460 miles in extent, is covered by ice gorges and precipices of incredible difficulty; and frost is so severe that no instrument of human invention can measure its intensity, and it blisters the skin like extreme heat. The greatest progress that has ever been made across these fields of ice and desolation was six miles a day.

GRAIN CROPS OF THE WORLD.

	Acres.	Bushels.	Value.	Bushels per Acre.
Wheat	154,000,000	2,076,000,000	$2,700,000,000	13
Oats	86,000,000	1,794,000,000	1,025,000,000	21
Barley	47,000,000	819,000,000	665,000,000	17
Rye	115,000,000	1,408,000,000	1,160,000,000	12
Indian Corn	103 000,000	2,300,000,000	1,180,000,000	22
	505,000,000	8,397,000.000	$6.730,000,000	17

TO MIX PAINTS FOR TINTS.—Red and black makes brown; lake and white makes rose; white and brown makes chestnut; white, blue and lake makes purple; blue and lead color makes pearl; white and carmine makes pink; indigo and lamp-black makes silver grey; white and lamp-black makes lead color; black and Venetian red makes chocolate; white and green makes bright green; purple and white makes French white; light green and black makes dark green; white and green makes pea green; white and emerald green makes brilliant green; red and yellow makes orange; white and yellow makes straw color; white, blue and black makes pearl gray; white, lake and vermillion makes flesh color; umber, white and Venetian red makes drab; white, yellow and Venetian red makes cream; red, blue, black and red makes olive; yellow, white and a little Venetian red makes buff.

THE DEATH RATE IN ALL THE STATES AND TERRITORIES OF THE U. S.

States and Territories.	Total Death Rate per 1,000.	Deaths by Races. 1880.				Deaths From Consumption, 1880.		
		White.	Colored.	Rate per 1,000 White.	Rate per 1,000 Colored.	Total.	Rate per 1,000 of Population.	Rate per 1,000 of total deaths.
Alabama	14.20	8,329	9,600	12.57	15.99	1,729	1.30	96.43
Arizona	7.20	281	10	7.91	1.89	18	40	61.85
Arkansas	18.46	11,307	3,505	19.11	16.61	955	1.20	64.47
California	13.33	10,462	1,068	13.63	10.95	1,802	2.00	156.28
Colorado	13.11	2,521	26	13.19	8.12	210	1.00	82.45
Connecticut	14.74	8,928	251	14.61	21.03	1,389	2.20	151.32
Dakota	9.65	1,249	55	9.37	27.09	116	80	88.95
Delaware	15.09	1,737	475	14.45	17.95	357	2.40	161.39
Dis. of Columbia.	23.60	2,090	2,102	17.71	35.25	793	4.40	189.16
Florida	11.72	1,718	1,441	12.04	11.35	263	90	83.25
Georgia	13.97	10,195	11,354	12.48	15.65	1,718	1.10	79.72
Idaho	9.90	306	17	10.54	4.72	22	1.50	68.11
Illinois	14.63	44,185	832	14.57	17.80	4,653	1.50	103.36
Indiana	15.78	30,213	1,000	15.58	25.31	3,943	1.90	126.32
Iowa	11.93	19,218	159	11.90	15.87	1,925	1.10	99.34
Kansas	15.22	14.100	1,060	14.80	24.12	1,117	1.10	73.63
Kentucky	14.39	18,338	5,380	13.31	19.81	3,733	2.20	157.39
Louisiana	15.44	7,038	7,476	15.46	15.41	1,514	1.60	104.31
Maine	14.67	9,470	53	14.64	25.43	1,829	2.80	192.06
Maryland	18.10	12,362	4,557	17.05	21.67	2,381	2.50	140.73
Massachusetts	18.59	32,720	429	18.55	22.22	5,207	2.90	157.07
Michigan	12.06	19,328	415	11.97	12.81	2,613	1.60	132.35
Minnesota	11.57	8,960	77	11.53	19.79	848	1.00	93.83
Mississippi	12.89	6,022	8,561	12.56	13.12	1,287	1.10	88.25
Missouri	16.89	33,649	2,966	16.63	20.37	3,004	1.60	98.42
Montana	8.58	297	39	8.39	10.33	19	.40	56.54
Nebraska	13.11	5,875	55	13.06	20.84	522	.90	88.02
Nevada	11.69	680	48	12.69	5.51	46	.90	63.18
New Hampshire	16.09	5,570	14	16.08	18.37	314	2.50	56.23
New Jersey	16.33	17,685	789	16.19	20.17	1,648	2.30	89.20
New Mexico	20.37	2,397	39	22.04	3.59	60	.40	24.63
New York	17.38	80,699	1,633	17.28	24.42	7,207	2.50	81.59
North Carolina	15.39	12,167	9,380	14.02	17.61	2,063	1.50	95.74
Ohio	13.32	40,956	1,654	13.13	20.63	5,912	1.80	138.74
Oregon	10.67	1,792	72	10.25	6.15	226	1.30	121.24
Pennsylvania	14.92	61,767	2,114	14.71	24.61	8,073	1.90	126.37
Rhode Island	17.00	4,523	179	16.75	27.15	691	2.50	146.95
South Carolina	15.80	5,194	10,534	13.28	17.42	1,543	1.50	98.10
Tennessee	16.80	17,312	8,607	15.20	21.32	3,767	2.40	145.33
Texas	15.54	18,998	5,737	15.87	14.54	1,622	1.00	65.57
Utah	16.77	2,403	11	16.87	7.14	69	.40	28.58
Vermont	15.12	5,008	16	15.11	14.98	813	2.40	161.82
Virginia	16.32	12,345	12,336	14.01	19.52	3,025	2.00	122.56
Washington	10.05	703	52	10.46	6.56	100	1.30	132.45
West Virginia	11.99	6,984	434	11.78	16.74	969	1.50	130.62
Wisconsin	12.17	15,927	84	12.16	14.28	1,681	1.20	104.99
Wyoming	9.09	183	6	9.41	4.43	5	.20	26.45
The U. S	15.09	640,191	116,702	14.74	17.28	91,551	1.82	120.95

RULERS OF THE PRINCIPAL NATIONS OF THE WORLD IN 1887.

Governments.	Rulers.	Title.	Year of Birth.	Date of Accession.
Argentine Repub.	Juarez Celman	Pres.	----	Oct. 12, 1886
Austria-Hungary	Franz Joseph I.	Emper.	1830	Dec. 2, 1848
Belgium	Leopold II.	King	1835	Dec. 10, 1865
Bolivia	G. Pacheco	Pres.	----	Aug. 1, 1884
Brazil	Pedro II. Alcânt.	Emper.	1825	April 7, 1831
Chili	J. M. Balmaceda	Pres.	1840	Sept. 18, 1886
China	Kwang Sü	Emper.	1871	Jan. 12, 1875
Colombia, U. S. of.	R. Nunez	Pres.	----	Aug. 7, 1886
Corea	Li Fin	King	----	——— 1864
Costa Rica	Bernardo Soto	Pres.	----	Mar. 12, 1885
Denmark	Christian IX	King	1818	Nov. 15, 1863
Ecuador	J. M. P. Caamano	Pres.	----	Oct. 23, 1883
France	F. P. Jules Grèvy	Pres.	1813	Jan. 30, 1879
Germany	Wilhelm I.	Emper.	1797	Jan. 18, 1871
Bavaria	Otto I	King	1848	June 13, 1886
Saxony	Albert	King	1828	Oct. 29, 1873
Wurtemberg	Karl I.	King	1823	June 25, 1864
Gt. Britain, Ireland	Victoria I.	Queen	1819	June 20, 1837
British India	Earl of Dufferin	Viceroy	1826	Sept. 10, 1884
Greece	Georgios I.	King	1845	June 6, 1863
Guatemala	M. L. Barillas	Pres.	----	——— 1885
Hayti	Gen. Salomon	Pres.	----	Oct. 23, 1879
Hawaiian Islands	Kalakaua I.	King	1836	Feb. 12, 1874
Honduras	Luis Bogran	Pres.	----	Nov. 27, 1883
Italy	Humbert I	King	1844	Jan. 9, 1878
Japan	Mutsu Hito	Mikado	1852	Feb. 13, 1867
Mexico	Porfirio Diaz	Pres.	----	Dec. 1, 1884
Morocco	Muley-Hassan	Sultan	1831	Sept. 25, 1873
Netherlands	Willem III.	King	1817	Mar. 17, 1849
Nicaragua	Adam Cardenas	Pres.	----	Mar. 1, 1883
Paraguay	Gen. B. Caballero	Pres.	----	Nov. 25, 1882
Persia	Nassr-ed-Din	Shah	1829	Sept. 19, 1848
Peru	General Caceres	Pres.	----	June 3, 1886
Portugal	Louis I.	King	1838	Nov. 11, 1861
Rome, Pontificate	Leo XIII.	Pope	1810	Feb. 20, 1878
Roumania	Karl I	King	1839	Mar. 26, 1881
Russia	Alexander III.	Emper.	1845	Mar. 1, 1881
Salvador	F. Menendez	Pres.	----	June 19, 1885
Santo Domingo	A. Wos y Gil	Pres.	----	July 20, 1885
Servia	Milan Obrenovic I.	King	1854	Mch. 6, 1882
Spain	M. de-las-Mercedes	Regent.	1880	——— 1885
Siam	Khulalonkorn I.	King	1853	Oct. 1, 1868
Sweden & Norway	Oscar II.	King	1829	Sept. 18, 1872
Switzerland	N. Droz	Pres.	----	Jan. 1, 1887
Turkey	Abdul-Hamid II.	Sultan	1842	Aug. 31, 1876
Egypt	Mohamed Tewfik	Kh'dve.	1852	Aug. 8, 1879
United States	Grover Cleveland	Pres.	1830	Mar. 4, 1885
Uruguay	General Resin	Pres.	----	Mar. 1, 1882
Venezuela	A. Guzman Blanco	Pres.	----	Sept. 14, 1886

PAINT REQUIRED FOR GIVEN SURFACE.—The following is an approximate rule for the quantity of paint required for a given surface: Divide the number of square feet of surface by 200. The result will be the number of gallons of liquid paint required to give two coats; or, divide by 18 and the result will be the number of pounds of pure ground white lead required to give three coats.

THE PUBLIC LANDS OF THE UNITED STATES.

The following is a tabular statement by the General Land Office, showing the number of acres of public lands of the United States surveyed in the land States and Territories up to June 30, 1886, during the past fiscal year, and the total of the public lands surveyed up to June 30, 1887; also the total area of the public domain remaining unsurveyed within the same.

Land States and Territories.	Areas of Public Lands in States and Territories In Acres.	Number of Acres of Public Lands Surveyed, and under contract up to June 30, 1887.	Total Area of Public and Indian lands remaining unsurveyed inclusive of the Area of Private Land Claims surveyed up to June 30, 1887.
Alabama	32,462,115	32,462,115	----------
Arkansas	33,410,063	33,410,063	----------
California	100,992,640	71,988,476	29,004,164
Colorado	66,880,000	58,184,750	8,695,250
Florida	37,931,520	30,704,578	7,227,002
Illinois	35,465,093	35,465,093	----------
Indiana	21,637,760	21,637,760	----------
Iowa	35,228,800	35,228,800	----------
Kansas	51,770,240	51,770,240	----------
Louisiana	28,731,090	27,067,762	1,663,328
Michigan	36,128,640	36,128,640	----------
Minnesota	53,459,840	42,316,088	11,143,752
Mississippi	30,179,840	30,179,840	----------
Missouri	41,836,931	41,836,931	----------
Nebraska	47,077,359	46,989,039	88,320
Nevada	71,737,600	32,793,702	38,943,898
Ohio	25,581,976	25,581,976	----------
Oregon	60,975,360	39,867,995	21,107,365
Wisconsin	34,511,360	34,511,360	----------
Alaska	369,529,600	----------	369,529,600
Arizona	72,906,240	13,804,538	59,101,702
Dakota	96,596,480	47,865,153	48,731,327
Idaho	55,228,160	10,350,554	44,877,606
Indian Territory	40,481,600	27,003,990	13,477,610
Montana	92,016,640	18,540,335	73,476,305
New Mexico	77,568,640	46,580,485	30,988,155
Utah	54,964,640	13,078,172	40,986,468
Washington	44,796,160	21,281,622	23,514,538
Wyoming	62,645,120	47,093,498	15,551,622
Public Land Strip	3,672,640	----------	3,672,640
Total	1,815,504,147	973.723,495	841,780,652

This estimate is of a very general nature, and affords no index to the volume of land remaining for entry, nor to the amount available for agricultural purposes. It includes Indian and other public reservations, unsurveyed private land claims, the sixteenth and thirty-sixth sections reserved for common schools, unsurveyed lands embraced in railroad, swamp-land, and other grants, the great mountain areas, the areas of unsurveyed rivers and lakes, and large areas wholly unproductive and unavailable for ordinary purposes.

TO KILL GREASE SPOTS BEFORE PAINTING.—Wash them with saltpetre, or very thin lime white-wash. If soap suds are used, they must be washed off thoroughly, as they prevent the paint from drying hard.

THE AMERICAN INDIAN.—Census of population, as reported by the Commissioner of Indian Affairs, 1886–87. Total Indian population of the United States, exclusive of Alaska:

Number of mixed bloods	20,567
Indians and mixed population, males	120,527
Indians and mixed population, females	127,234
Number of children between 6 and 16	46,877
Number of Indians who can read English only	23,495
Number of Indians who can read Indian only	10,027
Number of Indians who can read English and Indian	5,542
Number of Indians who can talk enough English for ordinary intercourse	38,801
Number of Indians over 20 who can read	19,539
Number of Indians under 20 who can read	19,525
Number of Indians who wear citizen's dress wholly	81,621
Number of Indians who wear citizen's dress in part	59,695
Number of Indians living upon and cultivating lands	9,612
Number of male Indians who labor in civilized pursuits, full blood	38,776
Number of male Indians who labor in civilized pursuits, mixed blood	4,647
Number of houses occupied by Indians	21,232
Number of Indian church members	28,663

The estimated number of Indians in Alaska is 30,000.

THE INDIAN RESERVATIONS in 1886 amounted to 135,978,345 acres, or 212,466 square miles approximately.

The popular idea that there was originally a large Indian population in the territory now covered by the United States, and that the numbers have decreased with each succeeding generation, as it came in contact with the fire-arms and fire-water of the white man's civilization, is probably erroneous. There are no statistics available, but careful observation and comparison has induced such students of Indian history as Mr. J. P. Dunn, Jr., to fix the Indian population of our present Territory, at the time of European colonization, at 530,000 approximately, and Mr. Elbridge S. Brooks, the latest writer upon the Indians, materially modifies those figures, expressing the opinion that in 1600 there were not over a half million of Indians between the shores of the Gulf of Mexico and the Arctic Ocean, and, in fact, that the Indian population of to-day is substantially the same in volume that it was when Columbus discovered America.

THE INDIAN AGENCIES of the United States Government are 61 in number, distributed in the States and Territories as follows: Arizona, 3; California, 4; Colorado, 1; Dakota, 9; Idaho, 3; Indian Territory, 7; Iowa, 1; Kansas, 1; Michigan, 1; Minnesota, 1; Montana, 6; Nebraska, 2; Nevada, 2; New Mexico, 3; New York, 1; North Carolina, 1; Oregon, 5; Utah, 1; Washington Territory, 6; Wisconsin, 2; Wyoming, 1. There are 10 Indian training schools, located at Carlisle, Pa.; Chilocco, Ind. T.; Fort Hall, Idaho; Fort Stevenson, Dak.; Fort Yuma, Cal.; Genoa, Neb.; Grand Junction, Col.; Lawrence (Haskell Institute), Kan.; Pawnee Agency, Ind. T., and Salem, Ore.

TREES—GROWTH AND AGE ATTAINED.—The length of life and size attained by trees depends upon species, soil, climate and the extent to which they are subject to attack from the enemies of plant life. Approximately an oak grows in three years 2 feet 10½ inches. A larch 3 feet 7½ inches, at seventy years it is full grown, and a tree of seventy-nine years was 102 feet high and 12 feet girth, containing 253 cubic feet. Another of eighty years was 90 feet and 17 feet and 300 cubic feet. An elm tree in three years grows 8 feet 3 inches. A beech, 1 foot 8 inches. A poplar, 6 feet. A willow

9 feet 3 inches. An elm is full grown in 150 years and it lives 500 or 600. Ash is full grown in 100 and oak in 200. The mahogany is full grown in 200 years to a vast size. A Polish oak 40 feet round had 600 circles. An oak in Dorsetshire in 1755 was 68 feet round, 2 near Cranborne Lodge are 38 feet and 36 feet. There are yews from 10 to 20 feet diameter, whose age is from 1,000 to 2,000 years. A lime in the Crisons is 51 feet round and about 600 years old. An elm in the Pays de Vaud is 18 feet diameter and 360 years old. The African baobad is the patriarch of living organizations, one specimen by its circles is estimated at 5,700 years old by Adamson and Humboldt. The trunk is but 12 or 15 feet to the branches, and often 75 feet round. A cypress in Mexico is 120 feet round and is estimated by De Candolle to be older than Adamson's baobab. The cypress of Montezuma is 41 feet round. Strabo wrote of a cypress in Persia as being 2,500 years old. The largest tree in Mexico is 127 feet round and 120 high, with branches of 30 feet. A chestnut tree on Mount Etna is 196 feet round close to the ground and five of its branchcs resemble great trees. De Candolle says there are oak trees in France 1,500 years old. The Wallace oak near Paisley is nearly 800 years old. The yew trees at Fountain's Abbey are about 1,200 years old. That at Crowhurst 1,500. That at Fortingal above 2,000. That at Braburn 2,500 to 3,000. Ivys reach 500 to 600 years. The larch the same. The lime 600 or 700 years. The trunk of a walnut tree 12 feet in diameter, hollowed out, and furnished as a sitting room, was imported from America and exhibited in London. The trunk was 80 feet high, without a branch, and the entire height 150 feet, the bark 12 inches thick and the branches from 3 to 4 feet in diameter. The California pine is from 150 to 200 feet high and from 20 to 60 feet in diameter. The forests in watered, tropical countries are formed of trees from 100 to 200 feet high, which grow to the water's edge, and on rivers, presenting a solid and impenetrable barrier of trunks 10 or 12 feet in diameter. The dragon tree is in girth from 40 to 100 feet and 50 to 60 feet high, and a misosa in South America is described whose head is 600 feet round.

WHEAT CROP OF THE WORLD BY COUNTRIES.

From the annual report of the Department of Agriculture of the wheat crop in 1886.

Countries.	Bushels.	Countries.	Bushels.
America:		Portugal	8,228,750
United States	457,218,000	Roumania	22,629,063
Canada	37,219,234	Russia, Poland	213,907,084
Arg'te Rep., Chili	28,800,625	Servia	4,525,813
Europe:		Spain	131,660,000
Austria-Hungary	143,001,488	Sweden and Norway	4,081.115
Belgium	18,514,688	Switzerland	1,645,750
Denmark	4,731,531	Turkey	41,143,750
France	299,107,620	Australasia	22,258,146
Germany	82,000,000	India	258,317,632
Gt. Brit'n. Irel'nd	65,285,353	Egypt	16,457,500
Greece	4,937,250	Algeria	32,915,000
Italy	129,412,133		
Netherlands	4,937,250	Total	2,032,934,775

SYMBOLIC MEANING OF COLORS.—White was the emblem of light, religious purity, innocence, faith, joy and life. In the judge, it indicates integrity; in the sick, humility; in the woman, chastity.

Red, the ruby, signifies fire, divine love, heat of the creative power, and royalty. White and red roses express love and wisdom. The red color of the blood has its origin in the action of the heart, which corresponds to, or symbolizes love. In a bad sense, red corresponds to the infernal love of evil, hatred, etc.

Blue, or the sapphire, expresses heaven, the firmament, truth from a celestial origin, constancy and fidelity.

Yellow, or gold, is the symbol of the sun, of the goodness of God, of marriage and faithfulness. In a bad sense yellow signifies inconstancy, jealousy and deceit.

Green, the emerald, is the color of the spring, of hope, particularly of the hope of immortality and of victory, as the color of the laurel and palm.

Violet, the amethyst, signifies love and truth, or passion and suffering. Purple and scarlet signify things good and true from a celestial origin.

Black corresponds to despair, darkness, earthliness, mourning, negation, wickedness and death.

POPULATION, CAPITOLS AND AREA OF PRINCIPAL NATIONS.

Countries.	Capitals.	Last Census	Populat'n.	Area Square Miles.
Argentine Republic	Buenos Ayres	1875	2,400,000	827,177
Austria-Hungary	Vienna	1880	37,741,413	240,415
Belgium	Brussels	1885	5,853,275	11,369
Bolivia	Lapaz	1878	2,080,000	500,740
Brazil	Rio de Janeiro	1883 est.	12,333,375	3,218,166
Canada, Dom. of	Ottawa	1881	4,324,810	3,204,381
Ceylon	Colombo	1881	2,758,166	24,702
Chili	Santiago	1878	2,400,396	124 084
Chinese Empire	Pekin	Est.	434,626,000	4,560,107
Colombia, U. S. of	Bogota	1870	2,951,323	320,638
Egypt	Cairo	1883	6,817,265	1,152,948
Denmark	Copenhagen	1880	2,096,400	14,784
Ecuador	Quito	1885	1,004,651	218,312
France	Paris	1881	37,405,290	204,030
Germany	Berlin	1885	46,852,450	208,624
Gt. Britain, Ireland	London	1881	35,246,633	121,571
Greece	Athens	1879	1,979,423	20,018
India, British	Calcutta	1881	252,541,210	810,542
Italy	Rome	1878	28,452,639	114,380
Japan	Yeddo	1882	36,700,118	146,568
Mexico	Mexico	1882	10,447,974	741,598
Morocco	Morocco	Est.	6,370,000	313,500
Netherlands	s'Gravenhage	1885	4,336,012	12,727
Norway	Christiania	1876	1,806,900	122,823
Paraguay	Asuncion	1879	346,048	91,980
Persia	Teheran	Est.	7,000.000	636,203
Peru	Lima	1876	3,050.000	72,413
Portugal	Lisbon	1878	4,550,699	34,595
Russian Empire	St. Petersburg	1883	103,912,640	8,138,541
Roumania	Bucharest	Est.	5,376,000	50,159
Servia	Belgrade	1884	1,903,350	18,781
Siam	Bangkok	Est.	5,750,000	280,564
Spain	Madrid	1877	16,625,850	193.171
Sweden	Stockholm	1885	4,682,769	170,927
Switzerland	Berne	1880	2,846,102	15,908
Turkey	Constantinople	Est.	25,161,100	860,322
Uruguay	Montevideo	1884	559,668	72,151
United States	Washington	1880	50,155,783	3,602,990
Venezuela	Caracas	1881	2,075,245	439,119

CLIMATE AND RAINFALL IN THE U. S.

Table showing the mean annual temperature and precipitation at principal points in each of the States and Territories, with the highest and lowest temperatures reported from any part of the State in which said stations are located. The minus sign (—) indicates temperature below zero.

States and Territories.	Station.	Mean Annual Temp.	Mean Annual Rain and Melted Snow, in Inches.	Highest Temp. Reported from State.	Lowest Temp. Reported from State.
Alabama	Montgomery	65 2	53.87	106.9	5.4
Arizona	Whipple Barracks	52.2	15 72	118.0	—18.0
	Yuma	72.0	2.82		
Arkansas	Little Rock	61.6	55.02	104.5	— 6.9
California	Red Bluff	62.7	28.42	110.5	— 3.8
	Sacramento	59.3	22.65		
	San Diego	60.6	10.83		
Colorado	Denver	49.2	15.06	105.2	—37.0
Connecticut	New Haven	49.6	49.34	100.0	—14.0
Dakota	Bismark	39.4	20.10	109.5	— 48.2
	Yankton	45.5	28.43		
Florida	Cedar Keys	70.2	57.16	104.0	14.9
	Jacksonville	69.1	57.06		
Georgia	Atlanta	60.9	55.66	105.0	— 2.4
Idaho	Lewiston	50 8	18.28	106.9	— 38.0
Illinois	Cairo	57.8	45 17	103.0	— 23.0
	Chicago	48.6	37 10		
Indiana	Indianapolis	52.7	46.03	101.0	— 25.0
Indian Territory	Sill, Fort	60.2	31.62	107 6	— 20.0
Iowa	Des Moines	48 5	39.91	104.4	— 31.5
Kansas	Concordia	50 5	28.24	108.0	— 29.0
Kentucky	Louisville	56.6	48.34	104 6	— 19.5
Louisiana	New Orleans	68.9	63.75	107.0	1.3
Maine	Portland	46 5	40.54	97 0	— 21.0
Maryland	Baltimore	55 4	43.11	101.0	6.0
Massachusetts	Boston	48 2	47 69	101 5	—14.0
Michigan	Mackinaw City	39.9	30.73	100.0	— 33.4
Minnesota	Duluth	39 3	33.09	103.4	—47.8
	St. Paul	43.7	28.82		
Mississippi	Vicksburg	65 4	60 54	101.0	3.1
Missouri	St. Louis	55.4	38.76	106.4	—21.5
Montana	Assinboine, Fort	41 0	16.25	110 8	— 63.1
	Custer, Fort	44 3	13 80		
North Carolina	Hatteras	61.3	72.34	107 1	— 5.0
New Hampshire	Mount Washington	26.1	83 53	74 0	—50.0
New Jersey	Barnegat	51 4	48.29	99 0	—10 0
New Mexico	Santa Fe	47 9	14 14	110.2	—13.0
	Silver City	54 0	20.19		
New York	New York City	51 2	43.69	100.2	— 22.9
Nebraska	Omaha	49.4	35.60	107.0	—32.0
	Valentine	44.9	13.98		
Nevada	Winnemucca	49.4	9 74	104.0	—23.0
Ohio	Cincinnati	55.3	42 36	103.5	—20.3
	Columbus	52.0	42.35		
Oregon	Portland	52 5	51.49	110.0	— 34.0
Pennsylvania	Philadelphia	53.1	40 43	102.7	—16.0
Rhode Island	Newport	50 0	49.97	92.0	— 9.0

CLIMATE AND RAINFALL IN THE U. S. Continued.

States and Territories.	Station.	Mean Annual Temp.	Mean Annual Rain and Melted Snow in Inches.	Highest Temp. Reported from State	Lowest Temp. Reported from State.
South Carolina	Charleston	65.8	58.92	104.0	— 10.5
Tennessee	Memphis	60.9	54.96	104.0	— 16.0
Texas	Elliott, Fort	54.6	26 15	116.0	— 12.0
	Brownsville	72 4	35.36		
	El Paso	63.1	11.78		
Utah	Salt Lake City	51.3	17.36	101.0	— 20.0
Vermont	Burlington	45.1	28.76	97.0	— 24.8
Virginia	Lynchburg	57.0	43.44	103 0	— 5.0
	Norfolk	59.1	51.27		
Washington Ter	Dayton	48.2	27.77	108.7	— 26.0
	Olympia	49 6	53.77		
West Virginia	Morgantown	53.8	46.91	97.0	— 10.0
Wisconsin	Milwaukee	44.7	33.43	101.0	— 43.0
Wyoming	Cheyenne	44.2	11.14	100.5	— 53.5
	Washakie, Fort	22 1	.....		

REMARRIAGE.—There are no restrictions upon remarriage by divorced persons in Connecticut, Kentucky, Illinois and Minnesota Either party may remarry, but the defendant must wait two years and obtain permission from the court in Massachusetts. The decree of the court may restrain the guilty party from remarrying in Virginia. Parties cannot remarry until after two years, except by permission of the court, in Maine. In the state of New York the plaintiff may remarry, but the defendant cannot do so during the plaintiff's lifetime, unless the decree be modified or proof that five years have elapsed and that complainant has married again and defendant's conduct has been uniformly good. Any violation of this is punished as bigamy, even though the other party has been married. In Delaware, Pennsylvania, and Tennessee, no wife or husband divorced for violation of the marriage vow can marry the *particeps criminis* during the life of the former husband or wife, nor in Louisiana at any time; such marriage in Louisiana renders the person divorced guilty of bigamy. Kansas courts grant divorces for the reason that the applicant's husband or wife has obtained a divorce in another State and the applicant has been forbidden to remarry. If a wife in New York obtains a divorce from her husband, and he is forbidden to remarry, he may go to Kansas and obtain a divorce on that ground. If his wife contests the case, or can be served with the papers in Kansas, so that she is brought under the jurisdiction of the Kansas court, the courts of New York must recognize the divorce as valid, and cannot punish the husband for remarrying in New York.

New York permits polygamy and polyandry in certain cases. Desertion for five years, without knowledge that the deserter is living, permits the one deserted to marry again; and the second marriage is valid, though the deserter returns. The second marriage may be declared void, but only from the date of the decree, by a court of competent jurisdiction, upon proper petition; but if no such petition is made, and all parties are satisfied, one husband may live in lawful wedlock with two or more wives, or one wife with two or more husbands. The children will inherit, and both wives will be entitled to dower.

POPULATION OF THE CITIES OF THE U. S.

The following table gives the population of the various cities of the Union up to the close of 1887. The figures are either from State or local census reports, or from estimates by city officials.

New York City	1,500,000	Omaha, Neb	85,000
Philadelphia	1,125,000	Trenton, N. J	47,000
Brooklyn, N. Y	750,000	Covington, Ky	40,000
Chicago, Ill	750,000	Evansville, Ind	40,000
Boston, Mass	362 000	Peoria, Ill	45,000
St. Louis, Mo	450,000	Mobile, Ala	40,000
Baltimore, Md	460,000	Elizabeth, N. J	28,000
Cincinnati, Ohio	300,000	Erie, Pa	29,000
San Francisco, Cal	310,000	Bridgeport, Conn	42,000
New Orleans, La	240,000	Salem, Mass	28,500
Cleveland, Ohio	230,000	Quincy, Ill	30,000
Pittsburgh, Pa	170,000	Fort Wayne, Ind	30,000
Buffalo, N. Y	240,000	New Bedford, Mass	35,000
Washington, D. C	203,459	Terre Haute, Ind	32,000
Newark, N. J	160.000	Lancaster, Pa	30,000
Louisville, Ky	185,000	Somerville, Mass	32.000
Jersey City, N. J	132,000	Davenport, Iowa	26,000
Detroit, Mich	220,000	Wilkesbarre, Pa	40 000
Milwaukee, Wis	175,677	Des Moines, Iowa	32.000
Providence, R. I	122,050	Dubuque, Iowa	30,000
Albany, N. Y	105,000	Galveston, Tex	43,000
Rochester, N. Y	125,000	Norfolk, Va	40.000
Allegheny, Pa	91,000	Auburn, N. Y	26.000
Indianapolis, Ind	90,000	Holyoke, Mass	22.000
Richmond, Va	80,000	Augusta, Ga	30,194
New Haven, Conn	80,000	Chelsea, Mass	28,000
Lowell, Mass	70,000	Petersburg, Va	23,000
Worcester, Mass	68,389	Sacramento, Cal	32.500
Troy, N. Y	65,000	Taunton, Mass	21.500
Kansas City, Mo	165 000	Oswego, N. Y	22,000
Cambridge, Mass	62,000	Salt Lake City, Utah	30,000
Syracuse, N. Y	80,000	Springfield, Ohio	33.481
Columbus, Ohio	74,215	Bay City, Mich	32,000
Paterson, N. J	62,000	San Antonio, Tex	42,500
Toledo, Ohio	73,500	Elmira, N. Y	22,000
Charleston, S. C	62,000	Newport, Ky	20,400
Fall River, Mass	51,000	Poughkeepsie, N. Y	21,000
Minneapolis, Minn	124,000	Springfield, Ill	28,584
Scranton, Pa	86,666	Altoona, Pa	20,000
Nashville, Tenn	50,000	Burlington, Iowa	27,000
Reading, Pa	56,300	Cohoes, N. Y	25,000
Wilmington, Del	56,000	Gloucester, Mass	22.000
Hartford, Conn	43.000	Lewiston, Me	19,000
Camden, N. J	42,000	Pawtucket, R. I	19,000
St. Paul, Minn	135,000	East Saginaw, Mich	16,000
Lawrence, Mass	40,000	Williamsport, Pa	20,000
Dayton, Ohio	42,500	Yonkers, N. Y	19,000
Lynn, Mass	39,000	Haverhill, Mass	25,000
Atlanta, Ga	60,846	Zanesville, Ohio	20,000
Denver, Col	70.000	Newburgh, N. Y	21,500
Oakland, Cal	45.000	Council Bluffs, Iowa	27,000
Utica, N. Y	35,000	Allentown, Pa	20,000
Portland, Me	40,000	Waterbury, Conn	35,000
Memphis, Tenn	75,000	Portland, Oregon	35,000
Springfield, Mass	40,000	Wilmington, N. C	20,000
Manchester, N. H	40.000	Binghamton, N. Y	23.500
St. Joseph, Mo	60,000	Bloomington, Ill	20,000
Grand Rapids, Mich	40,000	New Brunswick, N. J	25.000
Hoboken, N. J	31.500	Newton, Mass	18,000
Harrisburg, Pa	40 000	Bangor, Me	20.000
Wheeling, W. V	42,000	Montgomery, Ala	30,000

POPULATION OF THE CITIES OF THE U. S.

Continued.

Leavenworth, Kan	29,150	Derby, Conn	12,000
Houston, Texas	20,000	Galesburg, Ill	12,000
Akron, Ohio	18,000	Portsmouth, Va	14,000
New Albany, Ind	20,000	Burlington, Vt	11,000
Jackson, Mich	19,000	Portsmouth, Ohio	12,000
Woonsocket, R. I	20,000	Stamford, Conn	11,298
Racine, Wis	20,000	Chicopee, Mass	11,528
Lynchburg, Va	22,240	Muskegon, Mich	13,000
Sandusky, Ohio	20,000	Logansport, Ind	15,283
Oshkosh, Wis	25,000	Los Angeles, Cal	55,000
Newport, R. I	19,560	Attleborough, Mass	11,000
Topeka, Kan	23.000	Hannibal, Mo	14,000
Youngstown, Ohio	17.000	Austin, Texas	26,000
Norwich, Conn	16,000	Chillicothe, Ohio	12,500
Atchison, Kan	21,000	Woburn, Mass	11,000
Chester, Pa	15,000	Jacksonville, Ill	12,000
La Fayette, Ind	25,000	Virginia City, Nev	10,000
La Crosse, Wis	31,000	Watertown, N Y	14,000
Norwalk, Conn	15,000	Cumberland, Md	12,000
York, Pa	20,000	Belleville, Ill	14,000
Concord, N. H	15,000	Quincy, Mass	14,000
Lincoln, R. I	15,000	Weymouth, Mass	10,000
Alexandria, Va	15 000	New London, Conn	10 000
Schenectady, N. Y	18.000	Saginaw, Mich	12,000
Brockton, Mass	15.000	Ogdensburgh, N. Y	11,659
Newburyport, Mass	14.000	Madison, Wis	13,500
Lockport, N. Y	18,000	Stockton, Cal	16,000
Nashua, N. H	16,000	Winona, Minn	12,000
Pittsfield, Mass	16.000	Shenandoah, Pa	11,000
South Bend, Ind	22,000	Marlborough, Mass	10,000
Pottsville, Pa	14,000	Columbus, Ga	13,000
Orange, N. J	16,000	Eau Claire, Wis	13,000
Little Rock, Ark	29,000	Cedar Rapids, Iowa	11,000
Rockford, Ill	20,000	Columbia, S. C	15,000
Fond du Lac, Wis	16,000	Key West, Fla	12,000
Norristown, Pa	17,000	Mansfield, Ohio	10,000
Chattanooga, Tenn	36,000	Knoxville, Tenn	30,000
Macon, Ga	35,000	Portsmouth, N. H	10,000
Richmond, Ind	17,000	Newark, Ohio	14,000
Biddeford, Me	14,000	Sedalia, Mo	13,000
Georgetown, D. C	15,000	Auburn, Me	9,000
San Jose, Cal	20.000	Decatur, Ill	10,000
Fitchburg, Mass	16,500	Amsterdam, N. Y	10,000
Canton, Ohio	15,000	Jeffersonville, Ind	10,000
Rome, N. Y	14,000	Jamestown, N. Y	10,000
Northampton, Mass	12,000	Milford, Mass	9,500
Warwick, R. I	12.000	Raleigh, N C	14,000
Rutland, Vt	12,000	East St. Louis, Ill	15,000
Hamilton, Ohio	17,000	Ithaca, N. Y	9,200
Keokuk, Iowa	18,000	Stillwater, Minn	17,343
Steubenville, Ohio	16.000	Clinton, Iowa	10,000
Malden, Mass	12,017	Titusville, Pa	10,000
Easton, Pa	13 000	Peabody, Mass	9,000
Aurora, Ill	20,000	Janesville, Wis	12,000
Vicksburg, Miss	20,000	Cairo, Ill	14,000
Waltham, Mass	15.000	Ottumwa, Iowa	9,000
Dover, N. H	12,000	Alton, Ill	14,000
Danbury, Conn	12,000	Madison, Ind	10,000
Rock Island, Ill	13,000	Lexington	30,000
Joliet, Ill	18,000	Savannah, Ga	45,492

NATURALIZATION LAWS.

DECLARATION.—To become a citizen of the United States by naturalization the alien must declare upon oath, before a circuit or district court of the United States, or a district or supreme court of the Territories, or a court of record of any of the States having common law jurisdiction, and a seal and clerk, two years at least prior to his admission, that it is, *bona fide*, his intention to become a citizen of the United States, and to renounce forever all allegiance and fidelity to any foreign prince or State, and particularly to the one of which he may be at the time a citizen or subject.

OATH OF APPLICATION.—He must, at the time of his application to be admitted, declare on oath, before some one of the courts above specified, "that he will support the Constitution of the United States, and that he absolutely and entirely renounces and abjures all allegiance and fidelity to every foreign prince, potentate, State or sovereignty, and particularly by name to the prince, potentate, state or sovereignty of which he was before a citizen or subject," which proceedings must be recorded by the clerk of the court.

If it shall appear to the satisfaction of the court to which the alien has applied that he has resided continuously within the United States for at least five years, and within the State or Territory where such court is at the time held one year at least; and that during that time "he has behaved as a man of good moral character, attached to the principles of the Constitution of the United States, and well disposed to the good order and happiness of the same," he will be admitted to citizenship.

TITLES OF NOBILITY.—If the applicant has borne any hereditary title or order of nobility, he must make an express renunciation of the same at the time of his application.

SOLDIERS.—Any alien of the age of twenty-one years and upward, who has been in the armies of the United States and has been honorably discharged therefrom, may become a citizen on his petition, without any previous declaration of intention, provided that he has resided in the United States at least one year previous to his application, and is of good moral character.

MINORS.—Any alien under the age of twenty-one years who has resided in the United States three years next preceding his arriving at that age, and who has continued to reside therein to the time he may make application to be admitted a citizen thereof, may, after he arrives at the age of twenty-one years, and after he has resided five years within the United States, including the three years of his minority, be admitted a citizen ; but he must make a declaration on oath and prove to the satisfaction of the court that for two years next preceding it has been his *bona-fide* intention to become a citizen.

CHILDREN OF NATURALIZED PARENTS.—The children of persons who have been duly naturalized, being under the age of twenty-one years at the time of the naturalization of their parents, shall, if dwelling in the United States, be considered as citizens thereof.

CHILDREN BORN ABROAD.—The children of persons who now are or have been citizens of the United States are, though born out of the limits and jurisdiction of the United States, considered as citizens thereof.

PROTECTION ABROAD.—Statutes of the United States declares that "all naturalized citizens of the United States while in foreign countries are entitled to and shall receive from this Government the same protection of persons and property which is accorded to native-born citizens.

BIOGRAPHICAL CHART OF THE PRESIDENTS OF THE UNITED STATES.

The following chart contains in convenient form the outlines of the lives of all the Presidents, and will be valuable for reference.

	PRESIDENT.	BORN.	ANCESTRY.	FATHER.	MOTHER.	PLACE OF BIRTH.	Father's Vocation.
1.	Washington	Feb. 22, 1732	English	Aug. Washington	Mary Ball	Westmoreland Co., Va.	Planter
2.	Adams	Oct. 19, 1735	English	John Adams	S. Boylston	Quincy, Mass	Farmer
3.	Jefferson	April 2, 1743	Welch	Peter Jefferson	Jane Randolph	Shadwell, Va	Planter
4.	Madison	Mar. 16, 1751	English	James Madison	Nelly Conway	Port Conway, Va	Planter
5.	Monroe	April 28, 1758	Scotch	Spence Monroe	Eliza Jones	Westmoreland Co., Va.	Planter
6.	J. Q. Adams	July 11, 1767	English	John Adams	Abigail Smith	Quincy, Mass	Lawyer
7.	Jackson	Mar. 15, 1767	Scotch-Irish	Andrew Jackson	Eliz. Hutchinson	Union Co., N. C	Farmer
8.	Van Buren	Dec. 5, 1782	Dutch	Abr. Van Buren	Maria Hoes	Kinderhook, N. Y	Farmer
9.	Harrison	Feb. 9, 1773	English	Benj. Harrison	Eliz. Bassett	Berkeley, Va	Statesman
10.	Tyler	Mar. 29, 1790	English	John Tyler	Mary Armistead	Greenway, Va	Jurist
11.	Polk	Nov. 2, 1795	Scotch-Irish	Samuel Polk	Jane Knox	Near Pineville, N. C	Farmer
12.	Taylor	Sept. 24, 1784	English	Rich. Taylor	Sarah Strother	Near Orange C. H., Va.	Planter
13.	Fillmore	Jan. 7, 1800	English	Nath. Fillmore	Phebe Millard	Summerhill, N. Y	Farmer
14.	Pierce	Nov. 23, 1804	English	Benj. Pierce	Anna Kendrick	Hillsborough, N. H	Farmer
15.	Buchanan	April 23, 1791	Scotch-Irish	J. Buchanan	Elizabeth Speer	Cove Gap, Pa	Merchant
16.	Lincoln	Feb. 12, 1809	English	Thos. Lincoln	Nancy Hanks	Near Hodgenville, Ky.	Farmer
17.	Johnson	Dec. 9, 1808	English	Jacob Johnson	M. McDonnough	Raleigh, N. C	Sexton
18.	Grant	April 27, 1822	Scotch	Jesse R. Grant	H. Simpson	Point Pleasant, O	Tanner
19.	Hayes	Oct. 4, 1822	Scotch	R. Hayes	S. Birchard	Delaware, Ohio	Merchant
20.	Garfield	Nov. 19, 1831	English	Abram Garfield	Eliza Ballou	Cuyahoga Co., Ohio	Farmer
21.	Arthur	Oct. 5, 1830	Scotch-Irish	Wm. Arthur	M. Stone	Fairfield, Vt	Clergyman
22.	Cleveland	Mar. 18, 1837	English	R. F. Cleveland	Anna Neal	Caldwell, N. J	Clergyman

BIOGRAPHICAL CHART OF PRESIDENTS.—Continued.

	President	College.	Year of Grad	Family.				Offspring.		Politics.	Religion.
				Wife.							
				Married.	Name.	Born	Died.	Sons.	D'gts		
1.	Washington	None	----	1759	Martha Custis	1732	1801	----	----	Fed.	Episcopal
2.	Adams	Harvard	1755	1764	Abigail Smith	1744	1818	3	2	Fed.	Congregat
3.	Jefferson	William and Mary	1762	1772	Martha Skelton	1749	1782	1	5	Rep.	Liberal
4.	Madison	Princeton	1771	1794	Dolly Todd	1772	1849	----	----	Rep.	Episcopal
5.	Monroe	William and Mary	1776	1786	Eliza Kortwright	----	1830	----	2	Rep.	Episcopal
6.	J. Q. Adams	Harvard	1787	1797	Louisa Johnson	1775	1852	3	1	Rep.	Congregat
7.	Jackson	None	----	1794	Rachel Robards	1767	1828	----	----	Dem.	Presbyterian.
8.	Van Buren	None	----	1807	Hannah Hoes	1783	1819	4	----	Dem.	Reformed
9.	Harrison	Hampden-Sydney	1790	1795	Anna Symmes	1775	1864	6	4	Whig	Episcopal
10.	Tyler	William and Mary	1807	1813	Letitia Christian	1790	1842	3	4	Dem.	Episcopal
				1844	Julia Gardiner	1820	----	5	2		
11.	Polk	Univ. of N. C	1818	1824	Sarah Childress	1803	----	----	----	Dem.	Presbyterian.
12.	Taylor	None	----	1810	Margaret Smith	1788	1852	1	3	Whig	Episcopal
13.	Fillmore	None	----	1826	Abigail Powers	1798	1853	1	1	Whig	Episcopal
				1858	Caroline McIntosh	1810	1881	----	----		
14.	Pierce	Bowdoin	1824	1834	Jane M. Appleton	1806	1863	3	----	Dem.	Episcopal
15.	Buchanan	Dickinson	1809	----	----	----	----	----	----	Dem.	Presbyterian.
16.	Lincoln	None	----	1842	Mary Todd	1821	1882	4	----	Rep.	Methodist
17.	Johnson	None	----	1828	Eliza McCardle	1821	1876	3	2	Rep.	Methodist
18.	Grant	West Point	1843	1848	Julia Dent	1826	1885	3	1	Rep.	Methodist
19.	Hayes	Kenyon	1842	1852	Lucy W. Webb	1831	----	7	1	Rep.	Methodist
20.	Garfield	Williams	1858	1858	Lucretia Rudolph	1832	----	4	1	Rep.	Disciples
21.	Arthur	Union	1849	1859	Ellen L. Herndon	1837	1880	1	1	Rep.	Episcopal
22.	Cleveland	None	----	1886	Frances Folsom	1864	----	----	----	Dem.	Presbyterian

Pres. Washington, Jefferson, Monroe, J. Q. Adams, and Fillmore married widows. Pres. Jackson married a grass-widow.

BIOGRAPHICAL CHART OF PRESIDENTS. Continued.

	Presidents.	Vocation. In early life.	Vocation. When Elected.	Residence when Elected.	Inaugurated Y'r.	Inaugurated Age.	Years Served.	Died.	Age.	Cause.	Place.	Place of Burial.
1	Wash'gtn	Surveyr	Planter	Mt. Vernon, Va	1789	57	8	Dec. 14, 1799.	67	Pneumonia	Mt. Vernon, Va	Mt. Vernon, Va
2	Adams	Teach'r	Lawyer	Quincy, Mass.	1797	62	4	July 4, 1826.	91	Debility	Quincy, Mass.	Quincy, Mass.
3	Jefferson	Lawyer	Lawyer	Monticello, Va.	1801	58	8	July 4, 1826.	83	Diarrhœa	Monticello, Va.	Monticello, Va.
4	Madison	Lawyer	Lawyer	Montpelier, Va	1809	58	8	June 28, 1836	85	Debility	Montpelier, Va.	Montpelier, Va.
5	Monroe	Lawyer	States'n	Oak Hill, Va	1817	59	8	July 4, 1831.	73	Debility	New York City	Richmond, Va.
6	JQAdams	Lawyer	Lawyer	Quincy, Mass.	1825	58	4	Feb. 21, 1848.	81	Paralysis	Washing'n,D.C	Quincy, Mass.
7	Jackson	Lawyer	Lawyer	Hermitage, Ten	1829	62	8	June 8, 1845.	78	Consumption	Hermitage, Ten	Hermitage, Ten
8	VanBur'n	Lawyer	Lawyer	Kinderho'k,NY	1837	55	4	July 24, 1862.	80	Asthma	Lindenw'd, NY	Kinderh'k,N.Y
9	Harrison	Soldier	Farmer	North Bend, O.	1841	68	1 mo.	April 4, 1841.	68	Pleurisy	Washing'n,D.C	North Bend, O.
10	Tyler	Lawyer	Lawyer	Willism'b'h,Va	1841	51	3y. 11m.	Jan. 18, 1862.	72	Bilious	Richmond, Va.	Richmond, Va.
11	Polk	Lawyer	Lawyer	Nashville,Tenn	1845	50	4	June 15, 1849.	54	Diarrhœa	Nashville,Tenn	Nashville,Tenn
12	Taylor	Soldier	Soldier	BatonRouge,La	1849	65	1 y. 4m.	July 9, 1850.	66	Bilious Fever	Washing'n,D.C	Springfield,Ky.
13	Fillmore	Tailor	Lawyer	Buffalo, N. Y.	1850	50	2 y. 6m.	Mar. 8, 1874.	74	Debility	Buffalo, N. Y.	Buffalo, N. Y.
14	Pierce	Lawyer	Lawyer	Concord, N. H.	1853	49	4	Oct. 8, 1869.	65	Inflammation	Concord, N. H.	Concord, N. H.
15	Buchan'n	Lawyer	Lawyer	Wheatland, Pa.	1857	66	4	June 1, 1868.	77	Gout	Wheatland, Pa.	Lancaster, Pa.
16	Lincoln	Farmer	Lawyer	Springfield, Ill.	1861	52	4	April 15, 1865.	56	Assassinati'n	Washing'n,D.C	Springfield, Ill.
17	Johnson	Tailor	States'n	Greenville, Ten	1865	57	4	July 31, 1875.	67	Paralysis	Carter's Dt.Ten	Greenville, Ten
18	Grant	Soldier	Soldier	Washingt'nD C	1869	47	8	July 23, 1885.	63	Cancer	M.M'GregorNY	New York City
19	Hayes	Lawyer	Lawyer	Fremont, Ohio.	1877	54	4					
20	Garfield	Teacher	Lawyer	Mentor, Ohio.	1881	49	6½mo.	Sept. 19, 1881.	49	Assassination	Lg.Branch,N.J	Cleveland, O.
21	Arthur	Teacher	Lawyer	New York City	1881	51	3y.5½m	Nov. 18, 1886.	56	Bright's Dis.	New York City	Albany, N. Y.
22	Clevela'd	Teacher	Lawyer	Buffalo, N. Y.	1885	48						

LIBERTY BELL.—The order for the bell was given in 1751. The State House of Pennsylvania, in Philadelphia, work on which had been suspended for a number of years, was then approaching completion. The lower floors were already occupied by the Supreme Court in the chamber, while in the other assembled the Freemen of the Province of Pennsylvania, then consisting of one body. A committee was appointed by the Freemen, with Peter Norris as chairman, and empowered to have a new bell cast for the building. The commission for the bell was in the same year awarded to Robert Charles, of London, the specification being that the bell should weigh 2,000 pounds and cost £100 sterling. It was to be made by the best workmen, to be examined carefully before being shipped, and to contain, in well-shaped letters around it, the inscription: "By order of the Province of Pennsylvania, for the State House in the City of Philadelphia, 1752." An order was given to place underneath this the fatal and prophetic words from Leviticus xxv. 10: "Proclaim liberty throughout the land and to all the inhabitants thereof." The reason for the selection of this text has been a subject of much conjecture, but the true reason is apparent when the full text is read. It is as follows: "And ye shall hallow the fiftieth year and proclaim liberty throughout the land and to all the inhabitants thereof." In selecting the text the good Quakers had in memory the arrival of William Penn and their forefathers more than half a century before. In August, 1752, the bell arrived, but though in apparent good order, it was cracked by a stroke of the clapper while being tested. It could not be sent back, as the captain of the vessel who had brought it over could not take it on board. Two skillful men undertook to recast the bell, which, on being opened, revealed a bell which pleased very much. But it was also found to be defective. The original bell was considered too high, and a quantity of copper was added to the composition, but too much copper was added. There were a great many witticisms on account of the sound failure, and the ingenious workmen undertook to recast the bell, which they successfully did, and it was placed in condition in June, 1753. On Monday, the 8th of July (not the 4th), at noon, true to its motto, it rang out the memorable message of "Liberty throughout the land and to all the inhabitants thereof." For fifty years the bell continued to be rung on every festival and anniversary, until it eventually cracked. An ineffectual attempt was made to cause it to continue serviceable by enlarging the cause of its dissonance and chipping the edges. It was removed from its position in the tower to a lower story, and only used on occasions of public sorrow, such as the death of ex-Presidents and statesmen. Subsequently it was placed on the original timbers in the vestibule of the State House, and in 1873 it was suspended in a prominent position immediately beneath where a larger bell presented to the city in 1866 now proclaims the passing hours.

STOCK BROKERS' TERMS.—A Bull is one who operates to depress the value of stocks, that he may buy for a rise.

A Bear is one who sells stock for future delivery, which he does not own at the time of sale.

A Corner is when the Bears can not buy or borrow the stock to deliver in fulfillment of their contracts.

Overloaded is when the Bulls can not take and pay for the stock they have purchased.

Short is when a person or party sells stocks when they have none, and expect to buy or borrow in time to deliver.

Long is when a person or party has a plentiful supply of stocks.

A Pool or Ring is a combination formed to control prices.

A broker is said to Carry stocks for his customers when he has bought and is holding it for his account.

A Wash is a pretended sale by a special agreement between buyer and seller, for the purpose of getting a quotation reported

A Put and Call is when a person gives so much per cent. for the option of buying or selling so much stock on a certain day, at a price fixed the day the option is given.

NATURALIZATION LAWS.—The conditions under and the manner in which an alien may be admitted to become a citizen of the United States are prescribed by Sections 2165-74 of the Revised Statutes of the United States.

DECLARATION OF INTENTION.—The alien must declare upon oath before a circuit or district court of the United States, or a district or supreme court of the Territories, or a court of record of any of the States having common law jurisdiction, and a seal and clerk, two years at least prior to his admission, that it is, *bona fide*, his intention to become a citizen of the United States, and renounce forever all allegiance and fidelity to any foreign prince or State, and particularly to the one of which he may be at the time a citizen or subject.

OATH ON APPLICATION FOR ADMISSION.—He must, at the time of his application to be admitted, declare on oath, before some one of the courts above specified, "that he will support the Constitution of the United States, and that he absolutely and entirely renounces and abjures all allegiance and fidelity to every foreign prince, potentate, State or sovereignty, and particularly, by name, to the prince, potentate, State or sovereignty of which he was before a citizen or subject," which proceedings must be recorded by the clerk of the court.

CONDITIONS FOR CITIZENSHIP.—If it shall appear to the satisfaction of the court to which the alien has applied that he has resided continuously within the United States for at least five years, and within the State or Territory where such court is at the time held one year at least; and that during that time "he has behaved as a man of good moral character, attached to the principles of the Constitution of the United States, and well disposed to the good order and happiness of the same," he will be admitted to citizenship.

TITLES OF NOBILITIES.—If the applicant has borne any hereditary title or order of nobility, he must make an expsess renunciation of the same at the time of his application.

SOLDIERS.—Any alien of the age of twenty-one years and upward, who has been in the armies of the United States and has been honorably discharged therefrom, may become a citizen on his petition, without any previous declaration of intention, provided that he has resided in the United States at least one year previous to his application, and is of good moral character.

MINORS.—Any alien under the age of twenty-one years who has resided in the United States three years next preceding his arriving at that age, and who has continued to reside therein to the time he may make application to be admitted a citizen thereof, may, after he arrives at the age of twenty-one years, and after he has resided five years within the United States, including the three years of his minority, be admitted a citizen; but he must make a declaration on oath and prove to the satisfaction of the court that for two years next preceding it has been his *bona fide* intention to become a citizen.

CHILDREN OF NATURALIZED CITIZENS.—The children of persons who have been duly naturalized, being under the age of sixteen years at the time of the naturalization of their parents, shall if dwelling in the United States, be considered as citizens thereof.

CITIZENS' CHILDREN WHO ARE BORN ABROAD.—The children of persons who now are or have been citizens of the United States, are, though born out of the limits and jurisdiction of the United States, considered as citizens thereof.

PROTECTION ABROAD TO NATURALIZED CITIZENS.—Section 2000 of the Revised Statutes of the United States declares that "all naturalized citizens of the United States while in foreign countries are entitled to and shall receive from this Government the same protection of persons and property which is accorded to native-born citizens."

THE RIGHT OF SUFFRAGE.—The right to vote comes from the State, and is a State gift. Naturalization is a Federal right, and is a gift of the Union, not of any one State. In nearly one half the Union aliens (who have declared intentions) vote and have the right to vote equally with naturalized or native-born citizens. In the other half only actual citizens may vote. (See Table of Qualifications for Voting in each State, on another page.) The Federal naturalization laws

apply to the whole Union alike, and provide that no alien male may be naturalized until after five years' residence. Even after five years' residence and due naturaiization he is not entitled to vote unless the laws of the State confer the privilege upon him, and he may vote in one State (Minnesota) four months after landing, if he has immediately declared his intention, under United States law, to become a citizen.

THE NATIONS' DEAD.—Are buried in seventy-nine national cemeteries, of which twelve are in the Northern States. Among the principal ones in the North are Cyprus Hill, Brooklyn, N. Y., with its 3,786 dead; Finn's Point, N. J., which contains the remains of 2,644 unknown dead; Gettysburg, Pa., with its 1,967 known and 1,608 unknown dead; Mound City, Ill., with 2,505 known and 2,721 unknown graves: Philadelphia, with 1,909 dead, and Woodlawn, Elmira, N. Y., with its 3,090. In the South, near the scenes of terrible conflicts, are located the largest depositories of the nation's heroic dead, as follows: Arlington, Va., 16,264, of whom 4,349 are unknown. Beaufort, S. C., 9,241, of whom 4,493 are unknown; Chalmette, La., 12,511, of whom 5,674 are unknown; Chattanooga, Tenn., 12,962, of whom 4,963 are unknown; Fredericksburg, Va., 15,257, of whom 12,770 are unknown; Jefferson Barracks, Mo., 11.490, of whom 2,906 are unknown; Little Rock, Ark , 5,602, of whom 2,337 are unknown; City Point, Va , 5,122, of whom 1,374 are unknown; Marietta, Ga., 10,151, of whom 2,963 are unknown; Memphis, Tenn., 13,997, of whom 8,817 are unknown; Nashville, Tenn., 16,526, of whom 4.701 are unknown; Poplar Grove, Va., 6,199, of whom 4,001 are unknown; Richmond, Va., 6,542, of whom 5,700 are unknown; Salisbury, N. C., 12,126, of whom 12,032 are unknown; Stone River, Tenn., 5,602, of whom 288 are unknowm; Vicksburg, Miss., 16,600, of whom 12,704 are unknown; Antietam, Va., 4,671, of whom 1,818 are unknown; Winchester, Va., 4,559, of whom 2,365 are unknown. In all, the remains of 300,000 men who fought for the Stars and Stripes find guarded graves in our National cemeteries. Two cemeteries are mainly devoted to the brave men who perished in the loathsome prisons of the same name—Andersonville, Ga., which contains 13,710 graves, and Salisbury, with its 12,126 dead, of who 12,032 are unknown.

FARMS IN THE U. S. AND ABROAD.—The farms in the United States numbered one million and a half in 1850, and five million in 1887. The average size decreased in the same time from two hundred and three acres to less than one hundred and thirty. The farms in the United States may be summarized as follows:

More than 1,000 acres	26,600
More than 500 acres	76,000
From 50 to 500 acres	2,729,000
From 3 to 10 acres	134,887
Under 3 acres	4,352

Of these farms three-fourths in number are cultivated by the owners, the remainder are rented on shares or at a fixed sum.

In Great Britain there are 72,000,000 acres owned by 1,174,000 persons. Of these 852,000 possess less than one acre in extent. In England one man is recorded as owning more than 100,000 acres, in Ireland there are three of these territorial lords, in Scotland there are twenty-four. These twenty-four men own one-fourth of the area of Scotland. One estate in the county of Sutherland measures 1,176,454 acres, or more than 1,800 square miles. The returns as to land proprietors in France vary; the division of land under the French law of descent operating to make constant changes. But with an area of nearly 100,000,000 acres of arable land, and a population of less than 40,000,000, there is the very large number of from 7,500.000 to 8,250,000 land owners, as estimated by different statisticians. Taking the number at 7,500,000; of these 3,000,000 were exempt from tax because of indigence, about 4,500,000 averaged twelve acres each, with an income of $80.00, and 60.000 had an income of not more than $940.00 a year. A few proprietors of large estates enjoyed large incomes.

THE LARGEST GUN in the United States, mounted, is the 20-inch Rodman smooth-bore at Fort Hamilton, N. Y. H. Its dimensions are as follows: Extreme length, 243.5 inches; maximum diameter, 64 inches; minimum diameter, 34 inches; length of bore in calibres, 10.50 inches. The service charge is 200 pounds of powder, and the weight of the projectile is 1,000 pounds. There is also a 12¼-inch rifle (wrought-iron lined) at Sandy Hook. Weight, 89,350 pounds; extreme length, 262.8 inches; maximum diameter, 55 inches; minimum diameter; length of bore in calibres, 18.53. This gun is used for experimental purposes, principally in testing powder. Charges from 70 to 200 pounds are used. Weight of projectile, from 700 to 800 pounds.

CONFEDERATE MONEY.—When the first issue of the Confederate money was scattered among the people, it commanded a slight premium. It then scaled down as follows: June, 1861, 90c; December 1, 1861, 80c.; December 15, 1861, 75c.; February 1, 1862, 60c.; February 1, 1863, 20c.; June, 1863, 8c.; January, 1864, 2c.; November, 1864, 4¼c.; January, 1865, 2½c.; April 1, 1865, 1½c. After that date it took from $800 to $1,000 in Confederate money to buy a one-dollar greenback.

REGISTRATION OF VOTERS.—The registration of voters is required in the States of Alabama, California, Colorado, Connecticut, Florida, Louisiana, Maine, Maryland, Massachusetts, Mississippi, Nevada, New Hampshire, North Carolina, Pennsylvania, South Carolina, Vermont and Virginia.

In Georgia registration is required in a few counties by local law.

In Iowa, Kansas and Nebraska it is required in all cities.

In Illinois registration is required, but (except in a few cities) a legal voter not registered may vote upon filing an affidavit by himself and another known legal voter that he is a qualified voter and has not already voted.

In Minnesota registration is required unless the voter is known to all the election judges.

In Missouri it is required in cities of 100,000 inhabitants and over, in New Jersey in cities of over 10,000 inhabitants, in Wisconsin in cities having 20,000 inhabitants and over.

In New York it is required in all cities and in all incorporated villages of over 7,000 inhabitants.

In Ohio it is required in the cities of Cincinnati and Cleveland only.

In Rhode Island it is required of voters not owning real estate.

The registration of voters is not required in the States of Arkansas, Delaware, Indiana, Kentucky, Oregon, Tennessee, Texas and West-Virginia. It is prohibited in Arkansas, Texas and West Verginia by constitutional provision.

WOMAN SUFFRAGE.—Women vote in Wyoming Territory on all questions on the same terms as men.

They vote for five years on the same terms in Washington Territory, but the Territorial Supreme Court in February, 1887, set aside the Woman Suffrage law, on a technical informality in the title of the act.

They voted in Utah until excluded by the Edmunds law, passed by the Forty-ninth Congress.

Women vote on school questions with more or less restrictions in fourteen States—viz.: Colorado, Indiana, Kansas, Kentucky, Massachusetts, Michigan, Minnesota, Nebraska, New Hampshire, New Jersey, New York, Oregon, Vermont and Wisconsin, and also in the Territories of Dakota, Idaho, Montana and Washington.

They have full municipal suffrage in Kansas, where in April, 1887, they polled 26,189 votes to 66,435 votes by men.

Women vote (by petition) on the sale of liquor in Arkansas and Mississippi.

In 1887 a Woman Suffrage Amendment to the Constitution of Rhode

Island was defeated in that State by a vote of 21,957 to 6,889, and Woman Suffrage bills were defeated in the Legislature of Massachusetts and Michigan.

THE VETO POWER is granted by the Constitution of the United States to the President, whereby he may veto bills passed by Congress, but such bills may be passed over the veto and become laws by a two-third vote of the members present of each House of Congress.

If any bill is not returned by the President of the United States to Congress within ten days (Sundays excepted) after it has been presented to him, it becomes a law the same as if he signed it, unless Congress by its adjournment prevents a return, in which case it does not become a law.

THE VETO POWER IN THE STATES.—The power to veto bills passed by the Legislature is granted to the Governor by the constitutions of the following States: Alabama, Arkansas, California, Colorado, Connecticut, Florida, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Minnesota, Mississippi, Missouri, Nebraska, Nevada, New Hampshire, New Jersey, New York, Oregon, Pennsylvania, South Carolina, Tennessee, Texas, Vermont, Virginia, West Virginia and Wisconsin.

The Governors of the Territories also have the veto power (U. S. Rev. Stat. 1842).

The constitutions of the following States do not grant the veto power to the Governor: Delaware, North Carolina, Ohio, and Rhode Island.

A *majority* vote of *the whole number of members elected* to each house of the Legislature can repass a bill vetoed by the Governor in the following States: Alabama, Arkansas, Indiana, Kentucky, New Jersey, Tennessee and West Virginia.

A *majority* vote of the *members of each house present* can repass a bill vetoed by the Governor in the following States: Connecticut and Vermont.

A *two-thirds* vote of the *members elected to each house* can repass a bill vetoed by the Governor in the following States: California, Colorado, Kansas, Louisiana, Illinois, Michigan, Missouri, Nevada, New York and Pennsylvania.

A *two-thirds* vote of the *members of each house present* can repass a bill vetoed by the Governor in the following States: California, Florida, Georgia, Iowa, Louisiana, Maine, Massachusetts, Minnesota, Mississippi, New Hampshire, Oregon, South Carolina, Texas, Virginia and Wisconsin. Also all the Territories.

A *two-thirds* vote of the members elected to the house which originated the bill and a *majority* vote of the other house can repass a bill vetoed by the Governor in Missouri.

A *three-fifths* vote of the *members elected to each house* can repass a bill vetoed by the Governor in the following States: Maryland and Nebraska.

The Governor may disapprove of items in the appropriation bill, and they shall be void unless repassed according to the rules prescribed for the passage of bills over the executive veto, in Florida, Georgia, Nebraska, New Jersey, New York and Texas.

In a number of States, if a bill be kept a certain length of time by the Governor, without returning it, it will become a law, except in cases of adjournment of the Legislature.

THE GREEK PHALANX comprised 8,000 men, forming a square battalion, with spears crossing each other, and shields united.

THE ROMAN LEGION was composed of 6,000 men, comprising 10 cohorts of 600 men each, with 300 horsemen each.

THE BATTERING RAM was of massive timber, 60 to 100 feet long, fitted with an iron head. It was erected under shelter to protect the 60 or 100 men required to work it. The largest was equal in force to a 36-lb. shot from a cannon.

FACTS ABOUT THE PLANETS.

Name.	Diam.	Distance from Earth.	Greatest Distance from Earth.	Number of Days in Year.	Ratios of Comparison with the Earth being 100.
	Miles.	Miles	Miles.		Size.
Mercury..	2,962	47,000,000	136,000,000	88	5
Venus....	7,510	23,000,000	160,000,000	225	80
Earth....	7,916	.....	.....	365	100
Mars.... ..	4,920	62,000,000	245,000,000	687	14
Jupiter ..	85,390	409,000.000	592,000.000	4,333	138,700
Saturn.. .	71,904	831,000,000	1,014,000,000	10.759	74.600
Uranus ..	33,024	1,746,000,000	1,929,000,000	30,687	7,200
Neptune.	36,620	2,629,000,000	2,863,000,000	60,127	9.400

There have been 260 asteroids or smaller planets discovered up to the present time.

The diameter of the Sun is 888.646 miles, and its density as compared with the Earth (the Earth being 100), 25.

It is supposed that *a*2 Centauri, one of the brightes stars of the Southern hemisphere, is the nearest of the fixed stars to the earth. The researches on its parallax by Henderson and Maclear gave it for its distance from the earth, in round numbers, twenty billions (20,000-000,000) of miles. At the inconceivably rapid rate at which light is propagated through space, it would require three years and three months to reach the earth from this star.

FACTS ABOUT THE EARTH.—Diameter at the Equator, 7,925 miles. Diameter at the Poles, 7,899 miles. Mean diameter, 7,916 miles. Circumference at the Equator, 24,899 miles. Surface of the earth, in round numbers: Land, 54,500,000 square miles; water, 142,000,000 square miles; total, 196,900,000 square miles. Mean annual temperature: Poles, 30°; Polar regions, 36°; Torrid Zone°. 75°; Equator 82°; Globe, 50°, Mean annual rainfall, 36 inches, Specific gravity, 5,450 to 5,600. Weight, 6,000,000,000,000,000,000,000 tons.

POPULATION OF THE EARTH BY CONTINENTS.

Continental Divisions.	Area in Square Miles.	Inhabitants.	
		Number.	Per Square Mile.
Asia.....	17,832,240	795,591,000	44.0
America.....	15,389,250	100,416,400	6.5
Africa.....	11,929,300	205,823,200	17.0
Europe.....	3,892,234	327,743,400	84.0
Australasia.....	3,581,140	4,232,000	1.1
Polar Regions,.....	1,791,280	82,500	....
Total.....	45,415,544	1,433,887,500	26.2

The average duration of human life is about 33 years. One quarter of the people on the earth die before age 6, one half before age 16 and only about 1 persons of each 100 born lives to the age 65. The deaths are calculated at 67 per minute, 97,790 per day, and 35,639.835 per year; the births, at 70 per minute, 100,800 per day, and 36,792,000 per year.

How Long Man has Existed, and how Long Civilization Will Last.—When we consider how many million of years our earth continued as an abode of millions of millions of living creatures ere yet even the lowest types of human life were developed, and during how many *tens of thousands of years* millions of human beings existed before thinking, reasoning, philosophic man was developed upon

this earth, we see that Nature, which is thus prodigal in regard to time, may well be prodigal also in regard to space, and leave many worlds in solar system, as well as long-time intervals in the history of any given world, unadorned by the presence of reasoning, philosophic beings. The same thought seems to me to be suggested when we look forward to the probable future of our earth's history. The civilized man is vigorously prepairing a rapid close to his own existence. The period during which the materials of civilization (as is now exists, at any rate) can endure at the present rate of their consumption, is a period which can be but as a second in the earth's future history. Within *a few hundreds of years* (or a few thousands at the outside) the earth-stores on which civilization is draining so lavishly and with ever-growing activity must be absolutely exhausted and man will be left to depend, like other animals, on the earth's annual produce—on her income, her capital bein r exhausted. That under such conditions man will retain his present position must be regarded as unlikely, to say the least.

SHRINKAGE OF GRAIN.—Wheat, from the time it is threshed, will shrink two quarts to the bushel or six per cent. in six months, in the most favorable circumstances. Hence, it follows that ninety-four cents a bushel for wheat when first threshed in August, is as good, taking into account the shrinkage alone, as one dollar in the following February.

Corn shrinks much more from the time it is first husked. One hundred bushels of ears, as they come from the field in November, will be reduced to not far from eighty. So that forty cents a bushel for corn in the ear, as it comes from the field, is as good as fifty in March, shrinkage only being taken into the account.

In the case of potatoes—taking those that rot and are otherwise lost—together with the shrinkage, there is but little doubt that between October and June, the loss to the owner who holds them is not less than thirty-three per cent.

This estimate is taken on the basis of interest at 7 per cent, and takes no account of loss by vermin.

HOW TO TEST QUALITY OF STEEL.— Good tool steel, with a white heat, will fall to pieces; with bright red heat will crumble under the hammer; with middling heat may be drawn to a needle-point.

To test hardening qualities, draw under a low heat to a gradually tapered square point and plunge into cold water; if broken point will scratch glass, the quality is good.

To test tenacity, a hardened piece will be driven into cast iron by a hardened hammer—if poor, will be crumbled. Excellence will be in proportion to tenacity in hard state. Soft steel of good quality gives a curved line fracture and uniform gray texture. Tool steel should be dull silver color, uniform, entirely free from sparkling qualities.

Aquafortis, applied to the surface of steel, produces a black spot; on iron the metal remains clean. The slightest vein of iron or steel can be readily detected by this method.

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POWER OF DYNAMITE.—Nitro-glycerine and dynamite do not, when exploded, exert as much force as is popularly believed. To speak precisely, the power developed by the explosion of a ton of dynamite is equal to 45,675 foot-tons. One ton of nitro-glycerine similarly exploded will exert a power of 54,452 foot-tons; and one ton of blasting gelatine, similarly exploded, 71,050 foot-tons. These figures, although large, are not enormous, and need not excite terror. Seventy-one thousand tons of ordinary building stone, if arranged in the form of a cube, would measure only ninety feet on the side, and if it were possible to concentrate the whole force of a ton of blasting gelatine at the moment of explosion on such a mass, the only effect would be to lift it to a height of a foot. The foregoing figures are derived from experiments made at Ardeer with an instrument that gives accurate results in measuring the force of explosives.

ORGANIZED LABOR.—The first strike in this country occurred in New York City in 1803, when a number of sailors struck for an advance of wages.

1806. The tailors this year established the first organization in the United States, in the present form of a trades union.

1819. The hatters organized a union of their craft.

1825–30. The Columbia Charitable Association of Shipwrights and Caulkers was organized.

1825. As early as this year the questions of shorter hours of work, better wages, and protection of operatives in factories were being agitated, and during the years that immediately followed, social unions of different crafts were springing up in cities and manufacturing centers.

1828. The Workingmen's Party, a local political organization in New York, Boston, Philadelphia, and other cities, appeared.

1829. At the State election in New York a workingmen's ticket was put in the field and elected one candidate to the Legislature—Ebenezer Ford, of New York.

1831. First local union of printers.

1831. The New England Association of Farmers, Mechanics and Workingmen formed.

1832. Ten-hour movement among the Shipwrights and Caulkers throughout New England cities was followed by strikes, which proved unsuccessful.

1834. A Mechanics' convention met at Utica, N. Y., and protested against convict labor.

1835. From this year onward strikes occurred in the different trades from time to time, with varying results.

1840. About this time many trades were organized, and some were enrolled in Labor Reform associations.

1840. President Van Buren established the ten-hour system for all employes of the Government in the Navy Yards.

1844–45. First effort of co-operation in connection with the labor movement originated in Boston.

1845. The New England Workingmen's Association was organized in Boston.

1845, October 12. The first Industrial Congress of the United States convened in New York.

1847. New Hampshire passed a law making ten hours a legal day's work.

1850. The labor agitation at this period was principally directed to a reduction in hours of work by legal enactment. It entered into politics, and many candidates were run on that issue.

1850–60. National and international trades unions were organized, granting charters to local bodies and organizing new branches, from Maine to California.

1861–65. The eight-hour movement obtained great impetus during the war.

1864. The Cigarmakers' International Union was formed.

1866. There was a revival of the labor movement, and many new organizations were formed.

1866. An eight-hour bill for the benefit of Government employes was introduced in Congress, and finally became a law in 1868 by the signature of President Johnson.

1866. First National Labor Congress met at Baltimore, August 20. This body met annually in different cities for several years.

1869. The Knights of Labor were organized in Philadelphia.

The labor movement from 1870 to the present time has been a continuous growth in the number of trades unions and increase in their membership, attended by strikes, lockouts and settlements by arbitration, the agitation for labor legislation and efforts at political party organization. Congress created a National Bureau of Labor in 1884.

Most of the trades unions organizations in the United States were represented at a convention held at Columbus, O., in December, 1886, when a National organization was formed, a constitution adopted, and the title taken of The American Federation of Labor. This body

and the Order of Knights of Labor of America (which is a secret order) are the two principal National labor organizations of the United States.

THE UNITED STATES POST OFFICE.—Few Americans really know how great a thing the Post Office establishment of the United States is. The United States has more post offices than all the countries of Europe, nearly four times as many as Great Britain or Germany, and nine times as many as Austria or France. British India, with 253,000,000 of people, has but 6,721 post offices. The United States, with 50,152,000 people, has 53,614 post offices of all kinds. Germany, with her 45,000,000 people, has but 15,428. Great Britain, for 35,000,000 people, has 16,434. Hayti, probably, has fewer post offices than any other country in the world, there being but three for 560,000 people. In the United States there is a post office for every 1,000 people. Aside from these statistics in regard to population, the postal system in the United States covers more ground than any other in the world. For instance, there are 121,000 miles of railway service, more than all of the rest of the world together. There were carried in the mails of the world in 1886 the enormous number of 11,640,000,000 pieces of mail matter, of which the mails of all the United States carried one-third, and the mails of Europe nearly two-thirds.

SOME MONSTER BUILDINGS.—Below will be found the dimensions of some of the most wonderful architectural feats of man:

Babel, now called Birs Nimroud, built at Babylon by Belus, was used as an observatory and as a temple of the Sun. It was composed of eight square towers, one over the other, in all 670 feet high, and the same dimensions on each side on the ground.

The Coliseum at Rome, built by Vespasian for 100,000 spectators, was in its longest diameter 615.5 feet, and in the shortest 510; embraced 5½ acres, and was 120 feet high.

Eight aqueducts supplied ancient Rome with water, delivering 40 millions of cubic feet daily. That of Claudia was 47 miles long and 100 feet high, so as to furnish the hills. Martia was 41 miles, of which 37 were on 7,000 aches 70 feet high. These vast erections would never have been built had the Romans known that water always rises to its own level.

The Temple of Diana, at Ephesus, was 425 feet long and 225 feet broad, with 127 columns, 600 feet high, to support the roof. It was 220 years in building.

Solomon's Temple, built B. C. 1014, was 60 cubits or 107 feet in length, the breadth 20 cubits or 36 feet, and the height 30 cubits or 54 feet. The porch was 36 feet long and 18 feet wide.

The largest one of the Egyptian pyramids is 543 feet high, 693 feet on the sides, and its base covers 11 acres. The layers of stones are 208 in number. Many stones are over 30 feet long, 4 broad and 3 thick.

The Temple of Ypsambul, in Nubia, is enormously massive, and cut out of the solid rock. Belzoni found in it four immense figures, 65 feet high, 25 feet over the shoulders, with a face of 7 feet and the ears over 3 feet.

Sesostris erected in the temple in Memphis immense statues of himself and his wife, 50 feet high, and of his children, 28 feet.

In the Temple of the Sun, at Baalbec, are stones more than 60 feet long, 24 feet thick and 16 broad, each embracing 23,000 cubic feet, cut, squared, sculptured and transported from neighboring quarries. Six enormous columns are each 72 feet high, composed of three stones 7 feet in diameter. Sesostris is credited with having transported from the mountains of Arabia a rock 32 feet wide and 240 feet long.

HOW TO DESTROY THE EFFECTS OF ACID ON CLOTHES.—Dampen as soon as possible, after exposure to the acid, with spirits ammonia. It will destroy the effect immediately.

FINENESS OF U. S. COIN.—The gold coins are nine-tenths fine; the silver coins, nine-tenths fine: the copper-nickel coins, such as the 5-cent piece and 3-cent piece, are one-fourth nickel and three-fourths copper; the bronze coins are 95 per cent. copper and 5 per cent. tin and zinc. The alloy in the gold coins is silver and copper; in the silver coins, copper.

CURIOSITIES OF THE BIBLE.—The Bible contains 3,566,480 letters, 773,746 words, 31,173 verses, 1,189 chapters and 66 books. The word AND occurs 46,277 times. The word LORD occurs 1,855 times. The word REVEREND occurs but once, which is in the 9th verse of the 111th Psalm. The middle verse is the 8th verse of the 118th Psalm. The twenty-first verse of the 7th chapter of Ezra contains all the letters of the alphabet, except the letter J. The longest verse is the 9th verse of the 8th chapter of Esther. The shortest verse is the 35th verse of the 11th chapter of St. John. There are no words or names of more than six syllables.

LEGAL BREVITIES.—A note dated on Sunday is void. A note obtained by fraud, or from one intoxicated, is void. If a note be lost or stolen, it does not release the maker, he must pay it. An endorser of a note is exempt from liability, if not served with notice of its dishonor within 24 hours of its non-payment. A note by a minor is void. Notes bear interest only when so stated. Principals are responsible for their agents. Each individual in partnership is responsible for the whole amount of the debts of the firm. Ignorance of the law excuses no one. It is a fraud to conceal a fraud. It is illegal to compound a felony. The law compels no one to do impossibilities. An agreement without consideration is void. Signatures in lead pencil are good in law. A receipt for money is not legally conclusive. The acts of one partner bind all the others. Contracts made on Sunday cannot be enforced. A contract with a minor is void. A contract made with a lunatic is void. Written contracts concerning land must be under seal.

NOTABLE BRIDGES OF THE WORLD.—Sublician bridge, at Rome, oldest wooden bridge; seventh century. Twice rebuilt, but ruins only remain.

The bridge at Burton, over the Trent, once the longest bridge in England, 1,545 feet.

The old London bridge was the first stone bridge. Commenced in 1176, completed in 1209.

The bridge of the Holy Trinity, Florence, built in 1569. Marble, 322 feet long.

The bridge of Sighs, at Venice, over which condemned prisoners passed to execution, was built in 1589.

The Rialto, at Venice, a single marble arch, built from designs of Michael Angelo. 98¼ feet long, completed 1591.

Coalbrookdale bridge, England, was the first cast-iron bridge. Built over the Severn in 1779.

New London bridge, granite, from designs of L. Rennier. Commenced in 1824, completed in about seven years; cost $7,291,000.

The Britannia bridge, over the Menai Strait, Wales, 103 feet above high water. Wrought iron, 1,511 feet long, finished in 1850. Cost $3,008,000.

The Niagara Suspension bridge was built by Roebling in 1852-55. Cost $400,000. 245 feet above water, 1,268 feet long, estimated 1,200 tons.

The Brooklyn bridge was commenced under the directions of J. Roebling in 1870, and completed in about thirteen years. 3,475 feet long, 135 feet high. Cost nearly $15,000,000.

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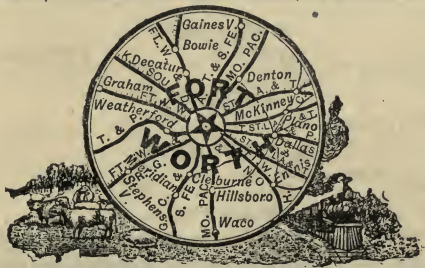

Alabama	$ .25	Maine	$ .25	Ohio	.25
Arizona	.25	Manitoba	.25	Ontario	.25
Arkansas	.25	Maryland	.25	Oregon	.25
California	.25	Massachusetts	.25	Pennsylvania	.25
Colorado	.25	Michigan	.25	Rhode Island	.25
Connecticut	.25	Mexico (old)	.25	So. Carolina	.25
Dakota	.25	Mississippi	.25	Tennessee	.25
Delaware	.25	Missouri	.25	Texas	.40
Florida	.25	Minnesota	.25	United States	.25
Georgia	.25	Montana	.25	Utah	.25
Idaho	.25	New Hampshire	.25	Vermont	.25
Indian Ter.	.25	New York	.25	Virginia	.40
Iowa	.25	New Jersey	.25	Washington Ter.	.25
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E. F. Kellner, Banker,	Globe City.	
CALIFORNIA.		
Eugene Pannenbery,	San Diego,	Bank of Prescott, Ari.
I. R. Marston,	Penryn,	Hollenbach's Bk., Auburn.
DAKOTA.		
Coe & Howard,	Columbia,	First National Bank.
Kendall Banking Co.	Howard.	
I. J. Eales,	Gettysburgh,	Potter County Bank.
W. H. Heaton,	Gettysburgh,	Potter County Bank.
B. J. Kelsey, Cashier,	Aurora.	
FLORIDA.		
M. MBlackburn,	Live Oak,	Judge E. J. Van, Madison.
W. W. Newton,	Enterprise.	
P. C. Fisher,	Green Cove Sp'ngs.	National Bank of Florida Jacksonville.
W. H. Edwards,	Lake Butler,	H.F.York, Ck. Bradford Co
J. T. Bernard & Son,	Tallahassee,	B. C. Lewis & Co. Bankers.
James S. Gardner,	Marianna.	Clerk Jackson County.
G. B. Griffin & Son,	Jacksonville,	N. W. Nat. Bank, Chicago.
D. O. Hichey & Son,	Fort Myers.	
INDIANA.		
B. M. Willoughby,	Vincennes,	First Nat. Bank.
IOWA.		
J. F. Bishop,	Afton,	Robert Truman, Banker.
Warren Walker,	Primghar,	
E. J. Wood, Cashier.	Estherville,	Bank of Estherville.
J. F. Jack,	Albia,	First National Bank.
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Sheridan Co. Bank,	Hoxie.	Bk. of America, N. Y. City.
Isaac Mullholland,	Hoxie,	Nat. Bk. of Kansas City, Mo.
KENTUCKY.		
R. M. Jones,	Stanton,	Exch'g Bk. Mt. Sterling.
MICHIGAN.		
Emmel White,	Reed City,	H. G. Packard, Bankers.
MINNESOTA.		
Geo. A. Clarke,	Mankato,	Mankato National Bank.
Bank of Glenwood,	Glenwood,	Gilman Sons & Co., N. Y. City.
H. H. Eckholdt,	Rochester,	Union Nat. Bank.

MISSOURI.

J. H. Kyle,	Harrisonville,	Harrisonville Bank.

NEBRASKA.

C. R. Glover,	Long Pine,	Brown County Bank.
O. F. Davis & Co.	Omaha.	
Alex. Reed,	Blair,	A. Castetter, Banker.
T. R. Evans,	Norden.	

NEW MEXICO.

Geo. L. Wratten,	Albuquerque,	First National Bank.

TEXAS.

Arthur C. Tompkins,	Hemptead,	J. A. Felher, Banker.

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Has been taken into consideration when making selections of the different articles here offered. Our object has been to get as good, or the best, that is manufactured, and to save all patent fees, commissions, and numerous profits or expenses, so that Subscribers may get the best at prices that will actually surprise them when they receive a Sewing Machine, Scale, Watch, Organ, or any other article they may send for.

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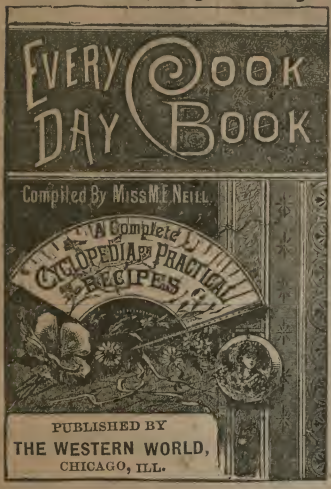
All orders for other publications, books, etc., that we do not publish ourselves are forwarded at once to the various publishing offices, and all articles that are shipped from Chicago are shipped promptly upon receipt of order; but if sent from other places a little time must be allowed for their arrival. The receipt of our paper will inform you that your order is received. Be particular to give your Post-office, as well as your Express or Freight office, in case they are not the same.

How to Send Money.

As we do a CASH business only, nothing will be sent until we receive the money. We send nothing C. O. D. Money may be sent by Bank Draft, Post Office or Express Money Order, Registered Letter, or in most cases a Postal Note, Currency or Postage Stamps (which we can use for small amounts) will come safely. Direct all communications to

The Western World,
Chicago, Illinois.

The Every Day Cook Book.



THIS is one of the most complete and valuable Receipt Books ever published. Besides all practical Receipts for Cooking, it contains a vast amount of information valuable to every housekeeper.

The Book is printed from new plates, on good paper, with elegantly engraved cover, printed in three colors. It contains 320 pages, and sells for One Dollar. Having arranged with the owners of the Copyright, we are enabled to make this combination offer:

FOR ONLY

$1.00

we will send the three following:

The Western World, Illustrated.
The Guide and Hand-Book.
The Every Day Cook Book.

☞Only $1.00 for the all above by mail, postpaid.

THE DORE ART PORTFOLIO.

This Portfolio is 11x14 inches, and besides a picture of Gustav Dore, the great French Artist, it contains the following beautiful engravings:

Expulsion from the Garden of Eden.
Entering the Ark.
Noah Cursing Ham.
Samson and Delilah.
Ruth and Boaz.
Death of Saul.
The Judgment of Solomon.
Daniel in the Lion's Den.
Daniel Confounding the Priests of Baal.
The Nativity.
Christ Healing the Sick.
Sermon on the Mount.
The Disciples Plucking Corn on the Sabbath.
Jesus Walking on the Water.
The Agony in the Garden.
Death on the Pale Horse.

Few people would value this Art Portfolio less than $1.00. To make the above combination still more desirable, we will include the Portfolio to any one sending ten cents additional, for postage.

Only $1.10 for all on this page, postpaid.

Ropp's Commercial Calculator.

Just published, an entirely NEW, REVISED, and greatly ENLARGED edition of this useful and popular work, the result of nearly twenty years of study and thought in devising Commercial Tables and original Methods for *simplifying* and *shortening* the work in *practical* calculations.

It will make the study of arithmetic interesting and *easy* for all, as it teaches only the simplest, shortest and most practical methods in a practical manner. Consequently it will prove of great advantage to those who have not had the opportunity or ability to master and *memorize* all its rules and principles in their earlier days; or those who would now and then *review*, provided they had the *cream* of this great and useful science condensed in 50 or 60 pages, which is here successfully achieved.

IT WILL SHOW AT A GLANCE

The correct value of any quantity of grain, stock, hay, coal, cotton, butter, eggs, and all kinds of merchandise, at any price, without making a single figure, as illustrated on opposite page.

The exact interest on any sum, for any time and at any rate per cent. The wages for any time, at any rate per month, week, day or hour.

The accurate measurement of logs, lumber, land, cisterns, tanks, bins, wagon-beds, corn-cribs, hay-stacks, cordwood, and carpenters', plasterers' and bricklayers' work

Besides, it contains exchange, discount, freight, grocers' and ginners' tables; tables of money, weights, measures, board, rent, specific gravity, etc. Also a perpetual Calendar for instantly ascertaining the "Day of the Week," for any date in the past or future.

The second part is a complete Arithmetic, designed for practical work, in which all its rules and principles are clearly explained, and illustrated by practical examples. Among its many *original* features, we have only space to mention the following:

An entirely new and simple process for "adding long columns of figures," with the greatest ease and unerring rapidity, by "casting out the tens," whereby the mind is entirely relieved, and the tendency to err, or get confused, greatly diminished

Many new methods for finding the value of articles sold by the bushel, hundred-weight, ton, piece, pound, yard, or dozen, without getting involved in fractions and complicated operations.

Three entirely new methods for computing time and interest, either one of which is easier and shorter than any rule heretofore published for computing interest.

The principles of "advance and discount" by percentage, thoroughly and clearly elucidated by six original tables and methods. This feature alone is worth many times the cost of the book to any teacher, accountant, or business man.

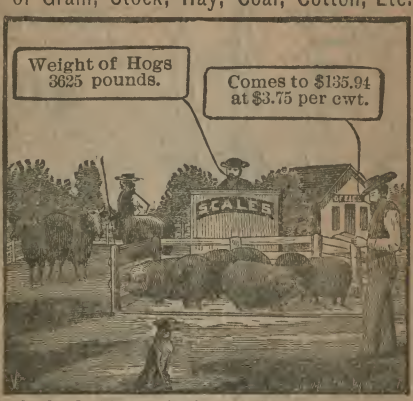
The many short and original rules in practical mensuration, among them the *only correct* one ever published for estimating the contents of saw-logs.

In fact, all the *practical* features found in Higher Arithmetics, Lightning Calculators, Ready Reckoners, Interest, Wages, Log and Lumber Tables, are here combined; besides many *original* Rules and Tables which really are the most valuable part of the work. And aside from this, a more convenient and desirable pocket memorandum, than Nos. 3 or 5, has never before been offered to the public.

The book is neatly printed on the finest quality of linen fiber pa-

per, 128 pages, and elegantly bound in pocket-book form; has full and clear explanations in English; also in German to nearly all the tables. The Nos. 3 and 5 are supplied with pockets, a silicate slate, and a valuable Account-book, which contains printed headings, and *self-instructing* formulas for keeping a systematic record of receipts and expenditures—in fact, all about book-keeping that is needed by farmers, mechanics and laborers.

Problems in Cost of Grain, Stock, Hay, Coal, Cotton, Etc.



Stock Shipper.—Your bunch of hogs weigh just 3625 lbs., and at $3.75 per cwt. they come to $125.94 Here is a check for the amount.

Farmer—Hold on, sir; there is a mistake somewhere. I see by Ropp's Commercial Calculator that the amount should be $135.94.

S. S.—(after looking over his figures carefully)—You are right; here is a $10 bill with your check Pardon my mistake.

(See Stock Table, p. 6; and Rules, Art. 98, 99.)

In the same rapid manner, the amount of a load of hay weighing, for instance, 2670 lbs., at $13 per ton, is instantly found to be $17.39. Of a bale of cotton, weighing 528 lbs., at 8¾ cts., $46.20, etc. See Hay, Coal and Cotton Tables, pp. 10 and 11; and Rules, Art. 96, 99.

Farmer—Good morning, sir. What are you paying for corn to-day?

Grain Buyer—We are paying 45 cents to-day.

F.—What is the weight of my load?

G. B.—The net weight is just 2950 lbs.

F.—(opening his Calculator)—Then I had on 52 bus. and 38 lbs., and it comes to $23.70.

(See Grain Tables, pp. 15, 28; also Rules, Art. 94, 95.)

G. B.—(after figuring it up)—Correct. Why, since when can you figure so *rapidly?*

F.—Oh, ever since I use Ropp's Commercial Calculator. It is a capital work, and saves not only time and labor, but often dollars and cents as well. I would not be without a copy for twice the amount of this load of corn.

"A handy little volume, in pocket-book form, in which is condensed an immense amount of useful information in the shape of tables and short cuts through calculations, which ordinarily bristle with a formidable array of perplexing figures. * * * Altogether it is an exceedingly useful manual, which will prove of great assistance to farmers and business men."—*Scientific American*, New York.

PRICES OF DIFFERENT STYLES OF BINDING.

No. 1. In English cloth, best quality, silk finish, gold title... **$ 50**
No. 3. Am. Russia Leather, with Account-book, Slate, Pocket, Flap, etc., with gold title..... **1 00**
No. 5. Finest Russia Calf, Gilt-edges, with Account-book, Slate, Pocket, Flap, etc., with gold title..... **1 50**

A Copy of "The Western World, Illustrated," one year, with each Book. This is a splendid offer.

How to Propagate & Grow Fruit.

It contains **80** solid, condensed pages, full book size, over **50** illustrations, and a beautiful lithographic colored plate. Over one hundred topics are discussed by those fitted by experience to advise.

40,000

COPIES SOLD the past eight months. It gives the latest and most approved methods found in no other publication. **IT TELLS HOW TO PROPAGATE** Strawberries, Raspberries, Currants, Gooseberries, Grapes, the Quince, Peach, Apricot, Plum, Cherry, Pear and Apple; with illustrations showing how to bud, how to graft, how to propagate from layers, stools inarching, with full instructions for grafting the grape.

SUCCESS WITH FRUITS.

IT TELLS HOW to begin Fruit Growing, how to Locate a Farm or Garden, Seasons for Planting, Laying Out a Fruit Farm, and about the Profits of Fruit Growing. Also, how to Prepare the Soil, about Planting, Mulching, Pruning, and Cultivation, Training, Summer Pinching.

HOW to GROW GRAPES AND BERRIES.

How Poor Men may begin. What Farmers should do about Fruit Growing. Causes of Failure and Success Growing Dwarf Pears. How to Care for Apples. Watering newly Set Trees; and lastly, a valuable Essay on **Raising Small Fruits**, by a Veteran Fruit Grower.

"Everything in Mr. Green's book is practical."—*N. Ohmer, President, Dayton, Ohio.*

"This is a book written by a man that knows what he is talking about. An experienced nurseryman, a careful observer, an excellent, forcible writer. It is just the book many of our friends will need.—*Rural New Yorker.*

Price of above book, by mail, postpaid, **25 Cents.**

GUIDE TO Fruit ✻ Culture.

This Book is just published by Chas. A. Green, and contains besides much additional information, all that was contained in his First Books, viz: "Plum and Cherry Culture," "Raspberry and Blackberry Culture," "Apple and Pear Culture," "Guide to Grape Culture," and "Guide to Strawberry Culture." The book contains 128 pages, and will be sent by mail for **only 25 cents.**

GREEN'S FRUIT GROWER.

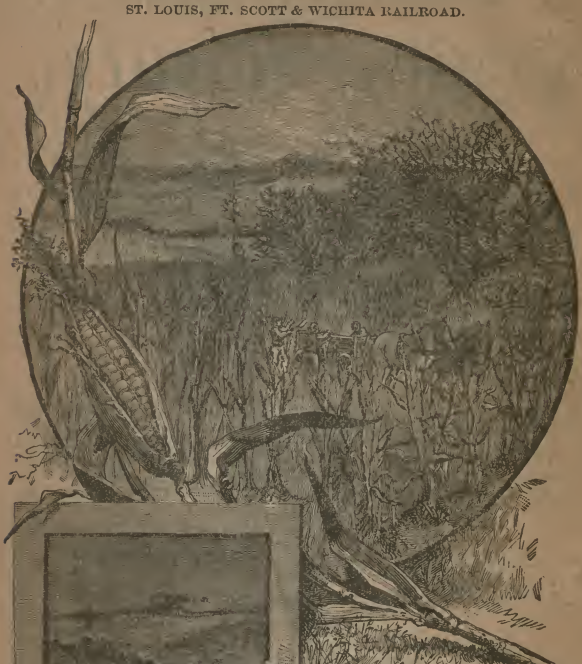
Published quarterly. Price 50 cents a year.

ALL FOR ONE DOLLAR.

For only $1.00 we will send, How to Propagate and Grow Fruit; Guide to Fruit Culture; Green's Fruit Grower, one year; and The Western World, Illustrated, one year, all postpaid.

CORN FIELD, KANSAS.

ST. LOUIS, FT. SCOTT & WICHITA RAILROAD.



The • Kansas • Farmer

Is the leading Agricultural, Live Stock and Family Weekly Journal published in Kansas, or the New West. Those wanting information of this great State should send for this paper. Subscription price **$1.50** a year. For the same price we will include THE GUIDE AND HAND-BOOK of Useful Information, and THE WESTERN WORLD, ILLUSTRATED, for one year, all postpaid for **$1.50.**

The Weekly Journal,

Kansas City, Mo , price, **$1.00**, is one of the best Weeklies for information of the Southwest. We include THE WESTERN WORLD, ILLUSTRATED, at the same price, both for **$1.00**, postage paid.

Our Great Sewing Machine OFFER.

THE DEMAND FOR A

Good, Well-Made Family Sewing Machine!

This Cut Represents No. 2.
(No. 1 is the same without cover).

is so universal, we have arranged for the most approved, most widely known, and best selling style machine (the Singer) to be manufactured expressly for our subscribers; and as we have already sent out several thousand, and from the rate we are receiving orders, can safely reckon on sending out many thousand more, we are able to have them produced

At a Cost Far Below the Usual Wholesale Prices!

and we give our subscribers the full benefit of this great saving. Although they are manufactured by the thousands,

Each Machine is Thoroughly Tested

By at least two or three competent persons, to see that it is perfect and does good work, before it leaves the factory.

ALL THE MATERIAL entering into the construction of these machines is of the very best, and all the parts are nicely fitted. The wood work is of Black Walnut, Oil Polished. The iron work is nicely Ornamented and Japanned, and they are an ornament in any lady's room. With each machine we include a

FULL SET OF ATTACHMENTS!

This cut Represents No. 3.

Which have formerly sold for as much as we now sell the machine, attachments and all. These attachments include one Johnson's Foot Ruffler, one set Hemmers, one Tucker, one Foot Hemmer or Friller, one Package of Needles, six Bobbins, one Screw Driver, one Oil Can, extra Check Spring, one Gauge, one Guage Screw, one Wrench, and an Instruction Book, which will enable any person not accustomed to running a machine to soon learn.

At the prices given each machine is crated in good order for shipment and delivered to the Express office or Freight Depot in Chicago, and they will go safely to any part of the country. The weight is about 100 pounds, and the cost of shipping within 500 miles of Chicago is from 50 cents to $1.00; to the Atlantic Coast, the Gulf or about the same distance West, about $1.50, and about double this to the Pacific Coast.

Each Machine is Guaranteed Perfect!

and the manufacturers give their guarantee for **FIVE YEARS.** From the large number we have sent out, and from the very few complaints we have had, we do not hesitate to guarantee every machine to give our subscribers entire satisfaction, and the only risk we ask them to run is to

Return the Machine to us at once if it is not entirely Satisfactory and we will return the money.

Owing to the large number we use, and consequently the great saving in manufacturing, we have made a reduction in prices, and as we give subscribers the benefit of this we expect them to do all they can to influence others to subscribe for THE WESTERN WORLD, ILLUSTRATED. Remember, at the prices given, the paper is included one year.

REDUCED PRICES.

No. 1 Singer Style Sewing Machine, $10.00
" 2 " " " " 11.00
" 3 " " " " 13.50
" 4 " " " " 15.00

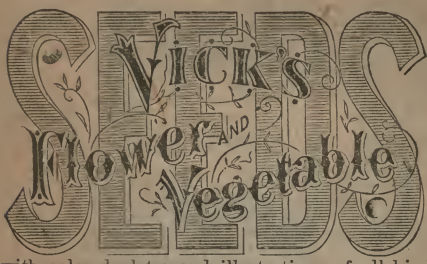
This cut Represents No. 4.

EXTRA NEEDLES.

We can send Needles by mail which will fit any make of the Singer Style Sewing Machine. They are put up, 10 in a paper, of the following assorted sizes: 2 No. ½, 3 No. 1, 3 No. 2, and 2 No. 3. No. ½ is the finest; No. 3 the coarsest. **Price, per paper, 25 Cents.** Large papers, 25 Needles of any one size, 50 cents.

Other extra parts will be furnished as follows: Shuttles, 50 cts.; Bobbins, 10 for 25 cts.; Belts, three for 25 cts.; Attachments, per set, $1.00. All by mail, postpaid, in quantities as above.

Our Great Seed Offer. Good for Years.



EVERYBODY knows what Vick's Seeds are, and they know if they get these seeds they are sure to grow, and that a whole season will not be lost on account of having planted worthless seeds. Their catalogue, which they call Floral Guide is a beautiful book of 140 pages with colored plates and illustrations of all kinds of Flowers and Vegetables, with a full description of each, and how and when to sow the seeds, and how to cultivate and care for them. It also gives the prices of all kinds as they are put up in packets for sending by mail. For EACH DOLLAR'S WORTH ORDERED THROUGH US WE WILL INCLUDE A COPY OF

THE WESTERN WORLD,

one year, and for TWO DOLLARS worth we will send the Paper and

GUIDE

and for THREE Dollars worth we will send the ENTIRE COMBINATION on page 3.

Upon receipt of your money you will have the **"FLORAL GUIDE"** mailed to you, also we send you an order on James Vick, Seedsman, for the full amount of your money in ANY SEEDS IN PACKETS that you may select from the Catalogue. You then forward your list with your order to Mr. Vick and you will receive your Seeds by return mail.

THE LITTLE COBBLER.

This is a tool for everybody. It is a hollow handle made of hard wood, five inches long, and weighing three ounces. It contains inside, on a spool, fifty feet of best waxed linen shoe thread. The spool is also hollow, and contains three awls and five needles of various shapes and sizes. The thread fits the needles, and the awls fit the handle, and are held by a set screw, as seen in the cut. It is for use in the house, field, camp, or on the road, for making immediate repairs to harness, etc., when one use of it will be worth more than its whole cost. Farmers, teamsters or drivers should not be without it. Price, by mail, only **50 cents**, with The Western World, Illustrated, one year.

THE CRICKET SCROLL SAW.

Boys always want to be doing something, and nothing amuses them more than a SCROLL SAW, and with which they can quickly learn to make many useful articles.

The demand for a

FOOT POWER SAW

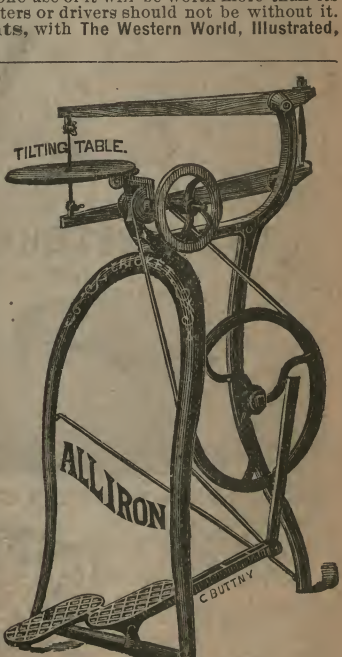
of this kind is so great that we have arranged to get an excellent Saw, and are able to furnish it with the paper at a very low price.

For Scroll Sawing it is about as good as any high priced saw, and is as nicely finished.

It has an Iron Tilting Table, second growth Ash Arms, 18 inches long; improved Clamps, etc.

Weight of Saw, 17 lbs.; weight when boxed, 35 lbs. Boxed for shipment by Express without extra charge.

Price, with Paper, **$2.50.**



Beautiful Oil Paintings.

We offer subscribers to THE WESTERN WORLD, ILLUSTRATED, an opportunity to get Genuine Oil Paintings, framed in elegant bevelled ornamental Gilt Frames, at one-fifth, and probably one-tenth, what they could get them at in any other way. Only by taking immense quantities are we able to make any such offer, and we feel sure that our subscribers everywhere will order them to decorate their homes.

What an Attractive Advertisement!

Beautiful and lasting, one of these Oil Paintings would make for any business man in town or city, lettered, as shown on engravings. Suppose "John Smith, Fancy Dry Goods Dealer, Public Square," should have one of these Paintings in the Post Office, the Depot, the Hotels, and all Public buildings; every one in town, or who ever passed through, would know John Smith's business and where he was, as no one would pass such beautiful Landscape Paintings

Without looking at them. In what other way could advertising be done so well and so cheaply. No. 4 is the only size we letter, which we do without extra charge. The lettering is on the sky, in one corner, so it does not mar the picture, while it is quite conspicuous. These pictures are all hand painted, the colors are bright and true to nature, and combined with heavy Gilt Frames, make handsome works of Art. They are crated in quantities given and at prices delivered to the Express office. When a dozen or more are ordered of one size, different subjects will be sent, all attractive and interesting Landscapes.

PRICES.

No. 1—Size 8x10 in., 1¼ in. gilt frame, $6 per doz.; $3.50 per ½ doz.
No. 2—Size 10x20 in., 2 in. gilt frame, $8 per doz.; $4.75 per ½ doz.
No. 3—Size 14x22 in., 3½ in. shell gilt frame, $12 per doz.; $7 ½ doz.
No. 4—Size 24x30 in., 3½ in. shell gilt frame, $15 per doz.; $8 ½ doz. $1.50 each. This size lettered without extra charge.
No. 5—Size 22x36 in., 4 in. shell gilt frame, $18 per doz.; $10 per ½ doz.; $2 each. Orders filled promptly upon receipt of same.

Money Drawer or Day Safe.

This Drawer is indispensable to any store or shop. The lock can be set on thirty-two differnt combinations, and the combination must be known to the person who tries to open it or else the bell will ring and alarm any one in the store. It is fastened underneath the counter with four screws, and is not in the way of the merchant and is out of sight of his customers. These Drawers are sold from $3.00 to $5.00. We will send the very best one made for **$2.00**, by Express, and include **THE WESTERN WORLD, ILLUSTRATED**, one year. Don't let your money lay around loose; get a Money Drawer. You will save the price in no time.

"THE LITTLE GEM."

BEST SELF-INKING SPRING STAMP.

—o—

Business Men, Agents, and even Farmers will find a Rubber Stamp a great convenience. Send us what you want on the Stamp, two or three lines, and we will send it by mail at once. Price, **No. 1, 80 Cts., No. 2, $1.00.** There is room on either for two or three lines, which is sufficient for name and address.

Copy of THE WESTERN WORLD, ILLUSTRATED, included with each Stamp.

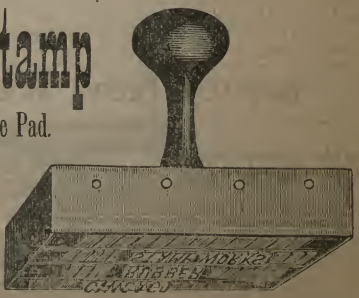
Rubber Stamp

With Inexhaustible Pad.

—o—

Price by mail, **60 Cents.**

Copy of THE WESTERN WORLD, ILLUSTRATED, included with each Stamp.

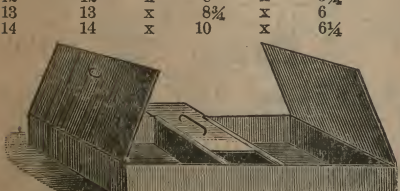


CHAMPION CASH OR DEED BOXES.

Each box is secured by a "CHAMPION" *Keyless Lock*, to be opened on *3 numbers*, affording the security of an ordinary *Safe*, but more quickly opened, as the lock is more simple. The boxes are of *extra heavy Tin*, and in all details belong to the *finest grade* of Japanned ware.

The owner may set a new combination without removing the lock, but two cannot be set on the same unless made alike to order. The combination can be recorded in any number of places, and thus be much *less liable to loss* than a key. The original combination is recorded at the factory. Full directions go with each box. Order by number. No farmer or business man should be without one.

No.	Length.		Width.		Depth.	Price of Boxes.	Price of Trays.
9	9	x	6	x	3¾	$3.50	$ .50
10½	10½	x	7	x	4⅛	3.75	.75
12	12	x	8	x	5¼	4.00	.80
13	13	x	8¾	x	6	4.25	1.25
14	14	x	10	x	6¼	4.50	1.50



Inside Trays

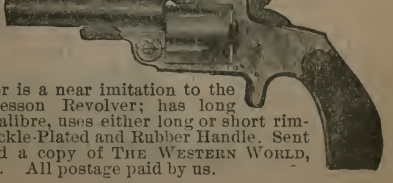
For the above boxes are very often essential in arranging the contents of a box to advantage.

These prices are for the Boxes at the factory, and owing to the numbers we are selling we have decided to furnish these boxes with a copy of THE WESTERN WORLD, ILLUSTRATED, one year, and deliver them free at any Express office or Post office in the United States. This is an offer that should not be overlooked, especially by those who have Deeds, Insurance Policies, Letters, Papers or valuables of any kind they wish to place where they will be secure from observation. We furnish these valuable little Safes with or without the Trays.

Smith New Revolver.

EQUAL TO ANY

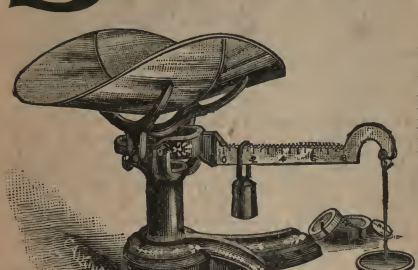
$10 REVOLVER.



Smith New Revolver is a near imitation to the renowned Smith & Wesson Revolver; has long fluted cylinder, 32-100 calibre, uses either long or short rim-fire catridges. Full Nickle-Plated and Rubber Handle. Sent by mail for **$3.50**, and a copy of THE WESTERN WORLD, ILLUSTRATED, one year. All postage paid by us.

Tea, Spice, or Confectioners'

SCALES

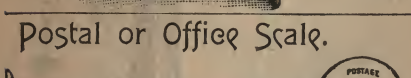


Nicely furnished with Brass Scoop, Steel Bearings and Brass Beam. Capacity, ¼ oz. to 4 lbs. Price, with paper, **$1.50**, by Express.

GRAIN TESTER.

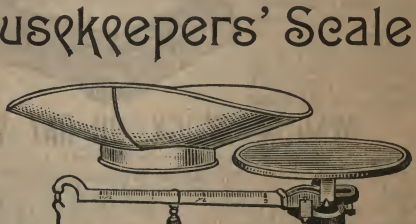
Capacity, 2 qts. Price, with paper, **$8.** by Express.

Postal or Office Scale.



This Scale is the same style as the Housekeepers' Scale. One side of the beam is marked to show the postage on all classes of mail matter without figuring; the other side is marked in the usual way. Capacity, ¼ oz. to 25 lbs. Price, with paper, **$2.00**, by Express.

The Housekeepers' Scale



This is the handsomest, cheapest, and best Housekeepers' Scale ever made. It has Steel Bearings, a Brass Beam, heavy Tin Scoop, and weighs from ¼ oz. to 25 lbs. Boxed for shipment it weighs 13 lbs., and is sent by Express. Price only **$2.50** with the Entire Combination on page 3 of this Catalogue, including THE WESTERN WORLD, ILLUSTRATED, Guide. Cook Book and Art Portfolio.

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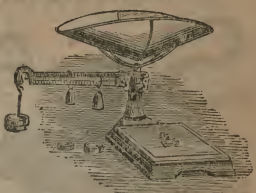

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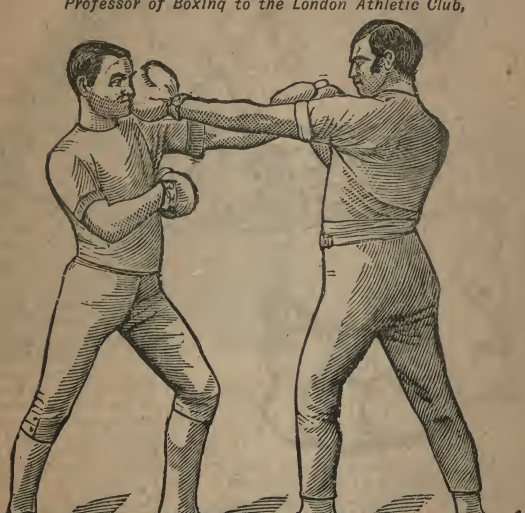

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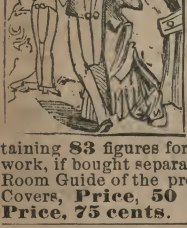

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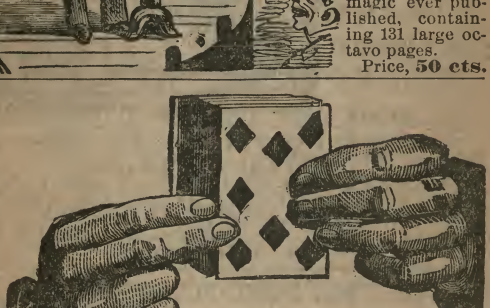

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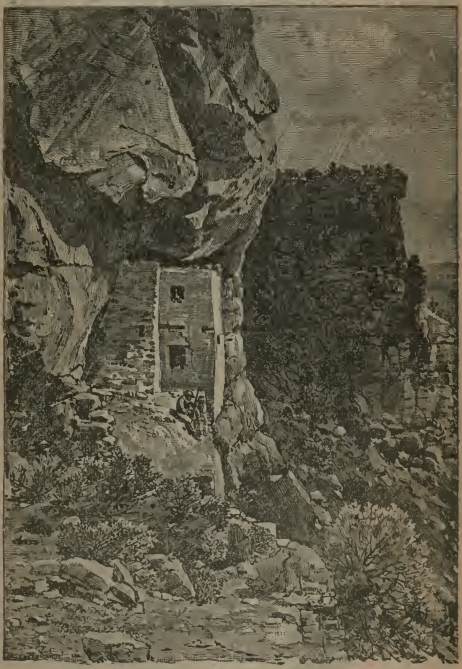

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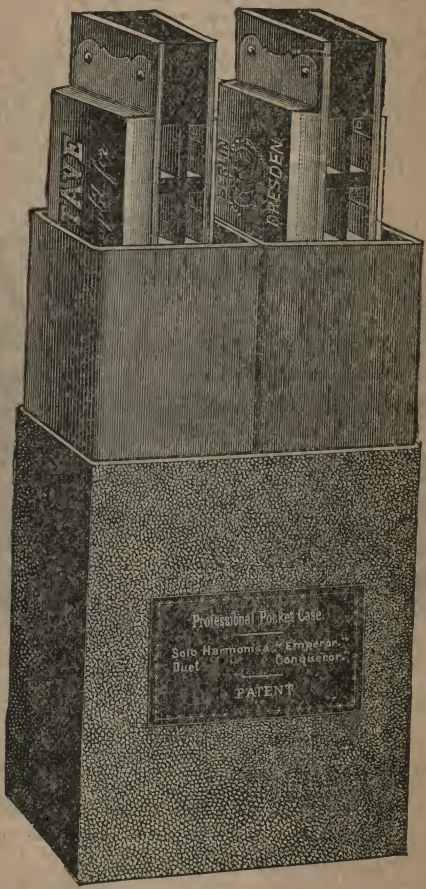

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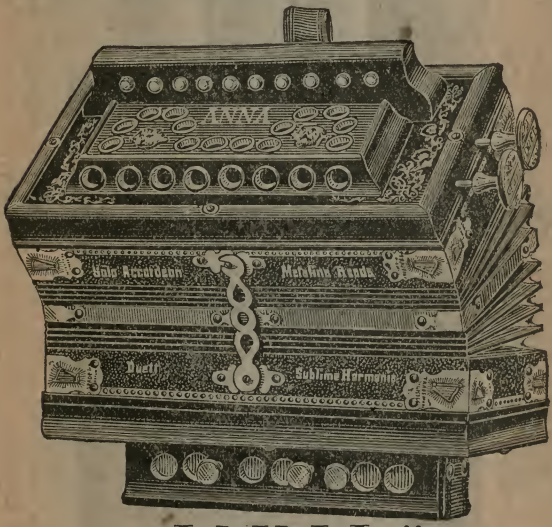

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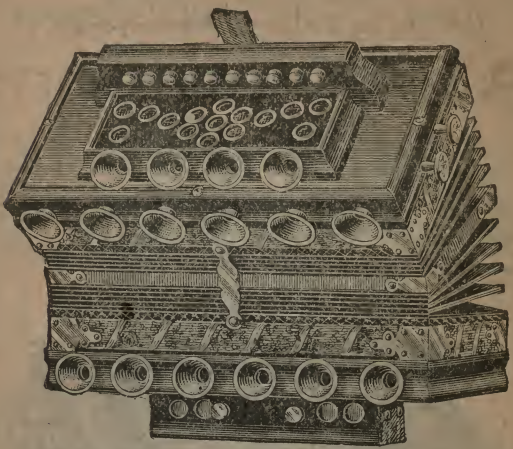

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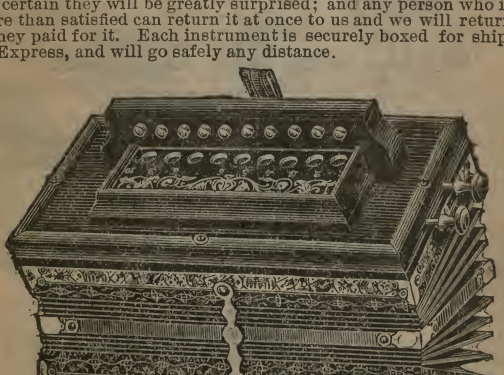

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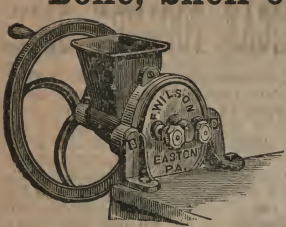

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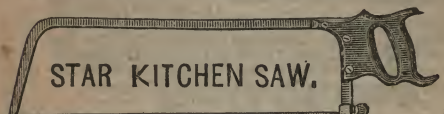

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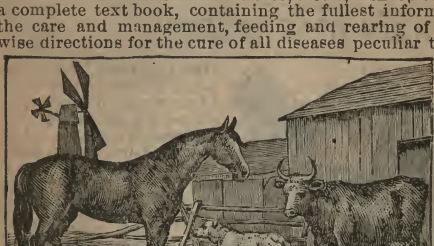

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The Little Western World

When these little people visit us separately things move along smoothly, but when they come together there is a rivalry to see who shall be "boss." Our "Little Man" wants to reason the case, while the "Little Lady" expects her wishes to be complied with, without questioning. We expect they will soon get over these feelings and each one will be buisy doing up papers and packages to send to subscribers, in all parts of the world.

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The case is made both in Cherry and Black Walnut, beautifully finished and polished. It has folding cover, book rest and knee swell. Back and front is full finished. This Organ contains the Carpenter Action and has the same warrant that is given with larger instruments of their make. The reeds are best quality, strong, rich and correct in tone. One set of reeds, forty-nine in all. This is a full four octave instrument of forty-nine keys.

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This is probably the most complete "Book of Instructions" ever published. Its size is 10x12 inches, and it contains 216 pages, beautifully printed and bound. Besides meeting the wants of beginners it tells just what to do if anything ails your Organ and with it no tuner is necessary. The price of this book is $2.00. We include it **free** with every Organ, also a copy of **THE WESTERN WORLD, ILLUSTRATED.**

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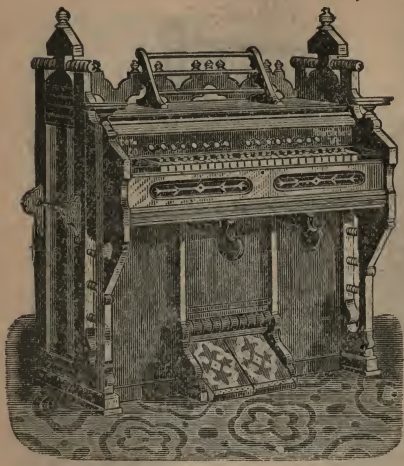
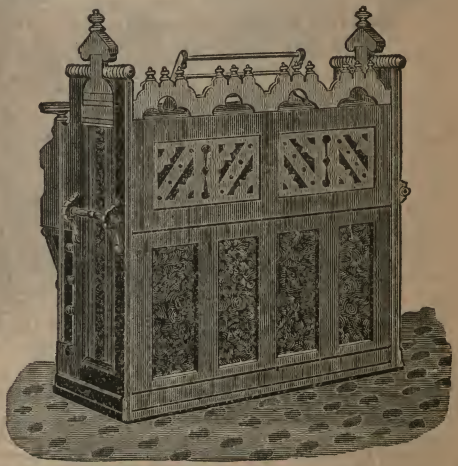


This Organ contains two full sets of reeds of sixty-one notes each, in all one hundred and twenty-two reeds, with Carpenter's Patent Divided Octave Coupler, coupling both right and left from centre of key-board, doubling the power of the Instrument.

Carpenter's Patent Aero-Dynamic Expression Indicator, a perfect guide to the use of the blow pedals. All Chapel Organs are mouse and vermin proof, and acclimatized to withstand the various changes of temperature to which they are subjected.

Price, $70.00.

We give both Front and Back view of Organ No. 750, which is Full Finished, and also serves to show the finish of other styles. Dimensions—Height, 44 inches; Length, 52 in.; Depth, 27 in.; Weight, boxed, 425 lbs.



ORGAN No. 160.

Same Style. Price, $65.00. Demensiens—Height, 48 inches; Length, 51 inches; Depth, 24 inches; Weight, 400 pounds.

PARLOR ORGAN, NO. 35.

This Organ has 2 five octave sets of reeds of 61 notes each; has Patent Vox Humana, two knee swells, Patent Expression Indicator, Patent Divided Octave Coupler. Ten stops. Action same as No. 750.

The Cases of the Carpenter Organs are superior in design, workmanship and finish. They are made of solid Black Walnut, with beautifully veneered panels of French and Circassian Walnut.

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This Organ has 2 five octave sets of reeds of sixty-one notes each, in all, 122 reeds. It has the Patent Vox Humana, two knee swells, Patent Expression Indicator, and Patent Divided Octave Coupler.

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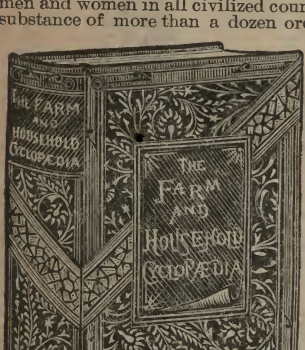

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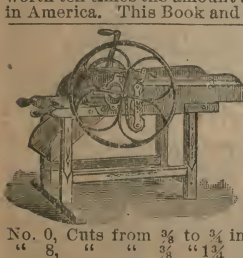

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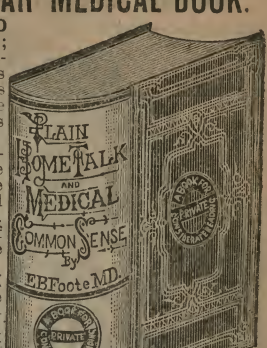

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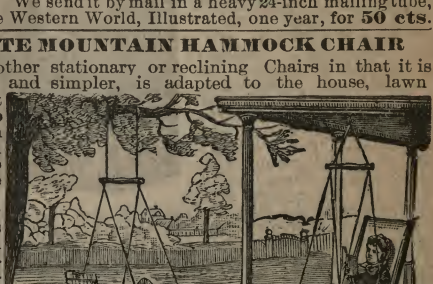

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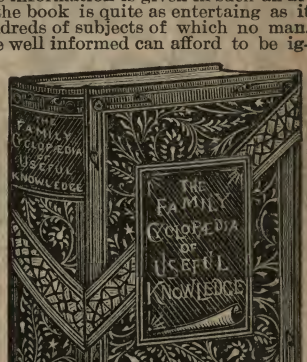

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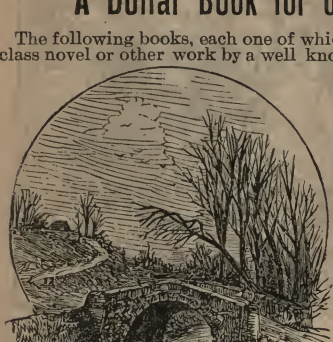

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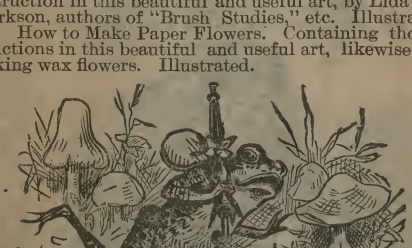

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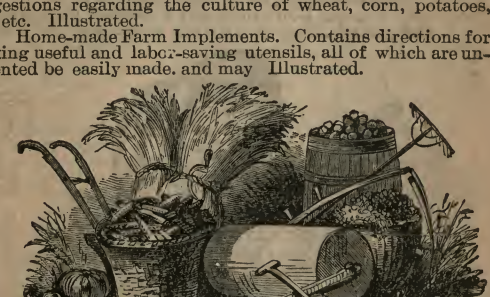

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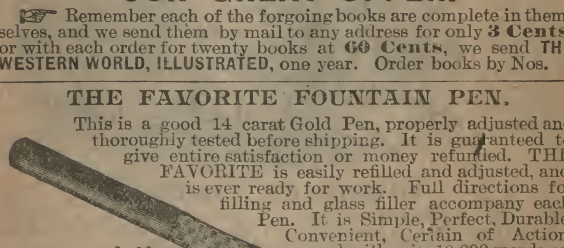

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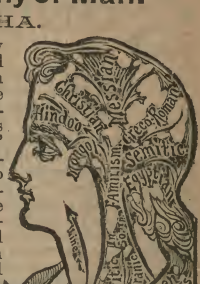

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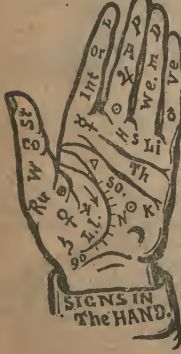


and the vital laws of sex-harmony in marriage. The signs of character in the face, the head, the body, and in the hands are elaborately described and clearly illustrated by engavings. This is the only book published where these are fully given, and those who would learn to read character will find this, alone, worth ten times the price. This "book of books," which has baffled the most learned, astounded the wise, and given food to the souls of thousands, handsomely bound in durable paper binding, will be sent by mail, postpaid, to any part of the world, for **35c**, or will include

HEALTH AND HOME,

a large eight-page, forty column monthly journal, price **$1.00** a year, devoted to everything that pertains to the health of the family and the comfort of the home; also a copy of

THE WESTERN WORLD, ILLUSTRATED,

one year, all for only **$1.00**. Postage Paid.

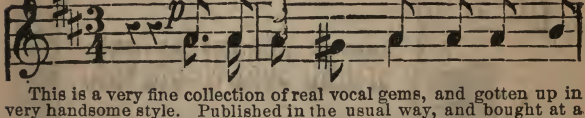
Choice MUSIC for the Million.

THE FAVORITE ALBUM OF

SONGS and BALLADS

The Favorite Album of Songs and Ballads, recently published, contains **32** pieces of choice and popular vocal music, full sheet music size, with complete words and piano accompaniment. The music is finely printed upon heavy paper, and neatly bound in one large and handsome book, with a very attractive cover. The following are the titles of the songs and ballads contained in the Favorite Album:

As I'd Nothing Else to Do; The Dear Old Songs of Home; Mother, Watch the Little Feet; Oh, You Pretty Blue-Eyed Witch; Blue Eyes; Katey's Letter; The Passing Bell; I Saw Esau Kissing Kate; Won't You Tell Me Why; The Old Garden Gate; Down Below the Waving Lindens; Faded Leaves; All Among the Summer Roses; Touch the Harp Gently, My Pretty Louisa; I Really Don't Think I Shall Marry; Dreaming of Home; The Old Cottage Clock; Across the Sea; There's a Silver Lining to Every Cloud; Strangers Yet; Not Yet; Somebody; A Year Ago; Bachelor's Hall; Ruth and I; Good Night; One Happy Year Ago; Jenny in the Orchard; The Old Barn Gate; Jack's Farewell; Polly; Whisper in the Twilight.



This is a very fine collection of real vocal gems, and gotten up in very handsome style. Published in the usual way, and bought at a music store, these **32** pieces would cost you **$11.20**; here you have them all complete in one handsome book. It should be remembered that this is not a cheap, poorly printed affair, but a handsomely bound book, and the pages are the full size of sheet music, as sold in the stores. Every lover of music should possess a copy. The Favorite Album of Songs and Ballads will be sent by mail, postpaid, upon receipt of only **25 Cents**. Book and Paper only **35 Cents**.

Fine Felt Tidies.

All Stamped Ready to be Worked.

These Tidies are made of the best quality of Embroidered Felt, and come in any color you wish, and can be stamped to order with designs of your own choosing. We will send you one all stamped, ready to be worked,

FOR 25 CENTS,

or will include a copy of THE WESTERN WORLD, ILLUSTRATED, one year, for **40 Cents.**

The Prophylactic Tooth Brush.

—o—

Endorsed by all Dentists as the most perfect Brush made.

This Brush is constructed on scientific principles, and has met with universal commendation by the profession.

By means of the tapered end, the separation, trimming and contour of the bristles, and the curved handle, the brush will reach every exposed portion of the teeth.

These Brushes have the novel feature of the aperture in the handle, by means of which they are easily suspended; the head being held away from the wall is quickly dried, greatly increasing the life and elasticity of the bristles.

Full directions accompany each Brush, giving instructions how to intelligently use it.

The Brushes are usually retailed at $1.00. We will send one by mail, postage paid, and THE WESTERN WORLD, ILLUSTRATED, one year, for **50 cts.**

A Wonderful Invention.

SPIRAL SCREW DRIVER.

Push on the handle and the screw goes in.

Two-thirds of the time saved in driving screws in hard or soft wood.

Carpenters and other mechanics pronounce it a perfect wonder.

MADE IN TWO SIZES.

No. 1.—Extended, 14 inches. Closed, 9 inches. Blade, ¼ inch. **Price, $1.50.**

No. 2.—Extended, 19 inches. Closed 12 inches. Blade, 5-16 inch. **Price, $1.75.**

Put Oil in Hole on the Side Before Using.

The above are the regular prices. To subscribers of

The Western World, Illustrated,

we will send one at **50 cents less** than above prices to any Post Office in the United States by mail, postage paid.

☞ Don't fail to send for one; it is worth the money, besides you get the Paper for one year.

How Private Geo. W. Peck Put Down the Rebellion.

THE FUNNY EXPERIENCES OF A RAW RECRUIT.

PECK'S LATEST AND BEST. MOST HUMOROUS BOOK OF THE AGE.

Dedication

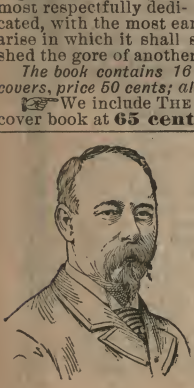
To the "Boys in Blue" and the "Boys in Gray,"

Who got real spunky at each other, some years ago, while playing in their adjoining door-yards, threw tomato cans and dead cats back and forth, called each other names, pulled hair and snubbed noses until they got into real, active war, in which such bravery was shown, on both sides, as the world has never seen before, and who have decided to be neighbors and friends again, ready to protect and defend each other against all the world: these reminiscences of the ridiculous part taken in the struggle by a raw recruit who was too scared to fight and too frightened to run, are most respectfully dedicated, with the most earnest hope that no occasion may ever again arise in which it shall seem necessary for one American citizen to shed the gore of another American citizen. GEORGE W. PECK.

"I found that I had got to throw away my trunk and knapsack, and all the articles I could not strap to my saddle, and when I asked for a mattress the men all laughed at me."

The book contains 16 full-page Illustrations. Bound in neat paper covers, price 50 cents; also cloth, stamped in black and gold, price $1.00.

☞We include THE WESTERN WORLD, ILLUSTRATED, with paper cover book at **65 cents**, or with cloth bound book for **$1.00**.



Either of Peck's Funny Books

given below, and THE WESTERN WORLD, ILLUSTRATED, one year, for only 50 cents.

For 25 cents additional we will send either of the other books.

PECK'S FUN.
PECK'S SUNSHINE.
PECK'S BOSS BOOK.
PECK'S BAD BOY AND HIS PA.
PECK'S BAD BOY AND HIS PA, NO. 2.

We will send either two of these books to any person who will send us $1.00 for four subscriptions to THE WESTERN WORLD, ILLUSTRATED, not included in any other combination.

Send your Orders and have some Fun.

A GOOD WATCH FOR EVERY SUBSCRIBER.

ALL GOOD TIME-KEEPERS.

The time has passed when it is neccessary to pay from $75 to $150 for a watch that will keep good time. The demand for watches is so great, and machinery for manufacturing all parts has been brought to such a state of perfection that good watches can now be furnished at from $2 to $15, which but a short time ago sold for ten times as much.

In this, as in all other offers, our object is to increase the list of subscribers to THE WESTERN WORLD, ILLUSTRATED, and we think it will be the wonder of all how a single Watch can be furnished at less than they are sold to Dealers. We have no doubt about each subscriber being satisfied; if he is not, he can return the Watch to us after examining it, and we will return money. All Watches forwarded by Express, or if 20 cts. additional to price is sent we will forward them by Registered Mail. For long distances this will be much cheaper and about as safe.

No. A 1. This is a Gold Filled, Lancaster Stem-Winding Watch, and is warranted by the Manufacturers for 20 years. The handsome Cases are genuine Gold-filled, manufactured of two plates of solid gold overlaying a plate of composition metal, and is warranted to wear for 20 years. This celebrated Lancaster Quick Train, Watch contains all the latest improvements, such as patent safety pinion, Genuine Compensation Balance, which makes it impossible for variation of temperature to affect its time-keeping. It is a quick train making, 18,000 beats to the hour, which gives it the advantage over slow beating watches with which the country is flooded. This Watch will be found nice enough for any Gentleman, and perfectly reliable for Conductors or others. The cases on all are finely engraved, but not all of one pattern. We feel sure any one will find this the *greatest bargain ever offered in Watches*. Prices, Open Face, **$12,50**; Hunting Case, **$15.00**. A copy of **THE WESTERN WORLD, ILLUSTRRTED,** with each Watch.

No. 92.

Gent's Hunting 3 oz. Silverore Watch.

Wears like coin silver, with a full jeweled, imitation Elgin Lever, Expansion Balance Movement, fully warranted. This is a good, reliable watch, for any business man. Price, Key Wind, **$4.00**; Stem Wind, **$5.50.**

THE WESTERN WORLD, ILLUSTRATED, included with every Watch.

No. 94.

Ladies' Hunting Gold-ore Watch.

Full Bassine, Shell Engraved, and finished exactly like a fine Gold Watch. Has an excellent Jeweled Movement and keeps perfect time.
Price, only **$3.75** each.

The Western World, Illus., included with every Watch.

No. 42. The Old Reliable Aluminium Gold Watch.

These Watches are Richly Engraved, have stood the test for years, and are acknowledged to be the best substitute for gold known, and always looks well. They have extra fine, full jeweled, expansion balance, full plate Patent Lever, American Style movement, and are splendid time keepers. A good horse or cow is frequently exchanged for a poorer watch than this. Price, Key-wind, **$3.25**; Stem-wind, **$4.50.**

No. 63.

A Solid Nickel Chatelain Watch.

—o—

Stem Winder,
Stem Setter,
Fine Jeweled Movement

And RELIABLE TIME KEEPER.

Every school girl can afford one of these beautiful little Watches.

Price, only - - **$3.50.**

THE WESTERN WORLD, ILLUSTRATED, with every Watch.

No. 88.

This New Genuine Solid Silverine Dust Proof Watch

Comes in 3 oz. open face, finely finished, smooth, full Bassine Cases, which look and wear like Solid Coin Silver, and will never tarnish, as the cases are the same throughout, with an extra good, full jeweled, expansion, balance, lever, Elgin style movement. The best selling Watch in the market. All complete and warranted. Key wind, **$3.35**; Stem wind, **$4.50**, with

THE
WESTERN WORLD,
ILLUSTRATED,
one year.

—o—

No. 91.

Ladies' Hunting Gold-ore Louis XIV Style Watch.

Box Case, beautifully engraved, with extra fine imported full jeweled movements, good time-keeper, looks as well as a solid gold watch. Price, Key Wind, **$3.75**; Stem Wind, **$5.25**, with

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WESTERN WORLD,
ILLUSTRATED,
included.

No. 16. This is an entirely New Watch. They are open-face style, Self-winders and Self-setters. Have a genuine solid Nickel Silver Case, giving them the same appearance as solid Coin Silver. They have fine French Enameled Dials protected by a heavy French flat Crystal. The works are entirely new, of Swiss make, accurately finished and adjusted, finely jeweled. The winding part, which is protected by a patent, is noted for its simplicity and durability, and is not found in any other watch. No complicated parts to get out of order. It is warranted to keep accurate time and to be just as represented. Price, only **$2.00**, with **THE WESTERN WORLD**, one year.

This illustration is an exact representation of the New Hercules Watch.

Best Clothes Wringer Made.

For Only $2.00.

Solid White Rubber Rolls vulcanized to the Iron Shaft. All iron parts Galvanized, and Steel Springs Japanned to prevent rust.

The Clothes Apron is made to fit the round (shape) of the tub, and while allowing free passage of the water prevents the Clothes from going into the tub or becoming wet after they are wrung.

Simply fastening to the tub makes the Wringer ready for use, the Steel Springs supplying the necessary pressure for any thickness of clothes.

The simplicity of this Wringer is its best recommendation. It is effective and durable. The Rolls upon which the principal wear on a wringer often comes, are of the very best. Having made a contract by which we get a large number at a nominal price, we can almost give them to subscribers. They will be sent by Express from the factory in the State of New York, direct to parties ordering. We will send one to any person who will send us **$2.00**, and include THE WESTERN WORLD, ILLUSTRATED, **1** year. Below is still a better offer:

EMPIRE DRYING BARS.

OPENED FOR USE.

CLOSED.

This is one of the neatest, most compact and best made Towel or Clothes Racks for drying purposes in the market. It requires small space when in use and can be folded up out of the way when not wanted. It is nicely finished, and the castings are galvanized. Its capacity when opened is ten arms, each two feet in length. The retail price is **$1.50.**

We will include a year's subscription to THE WESTERN WORLD, ILLUSTRATED, for **$1.00**, or for **$2.50** we will send Wringer and Drying Bars by Express, and THE WESTERN WORLD, ILLUSTRATED, by mail one year. The two articles will be sent together, saving one Express charge. Two or more can club together and save in Express charges or have them sent by freight. Send at once and don't miss a copy of the paper.

Texas Siftings.

The most humorous paper in America. Filled each week with Caricatures, Anecdotes and Mirth-Provoking Yarns that are new and fresh. No matter how many other papers you take, you want "Siftings." It is like the desert after a hearty dinner. It is just the paper to pick up when you are tired.

No paper sells like it at the news stands or on the cars. The price is **10 cents** a copy; this is **$5.20** a year. The subscription price is only **$4.00** a year. Send us **$4.00** and we will send you TEXAS SIFTINGS, one year, and the

Entire combination on Page 3, all by Mail.

Fort Worth, the Railroad Center of Texas.

THE GAZETTE,
Ft. Worth.
THE GREAT WEEKLY.
$1.00.

FARM and RANCH,
Dallas.
The Paper for Farmers.
$1.00.

Few people realize that the State of Texas is 800 miles from north to south, and 750 miles from east to west. It is many times larger than most of the Nations in the Old World. The two papers above mentioned give all the information one would care to know about this great State. Our Paper included with either at **$1.00**, or **THE WESTERN WORLD, ILLUSTRATED**, and GUIDE with the two at **$2.**

Magnetic Appliances.

Magnatism as a Curative Agent and its application to the human body is becoming well understood, and while not claimed to be a cure-all, it has been resorted to in very many cases where other means have failed, and it has worked wonderful cures.

HOW MAGNETISM OPERATES TO CURE DISEASE.

There are millions of terminal or peripheral nerves in every square inch of the human skin. They are sensory nerves and carry all impressions to the brain or other nerve centers. These nerves are so numerous it is impossible to put the point of the finest cambric needle between them, and when you strike the nerve the sensation is carried to the brain and pain results, which causes one to withdraw the part injured.

It is an undisputed fact that the functions of every organ in the human system are governed or carried on by either the brain or sympathetic nerve centers. The heaving of the chest, beating of the heart, the various secretions, etc., are all more or less dependent upon these nerve centers for their complete normal action. Now, the nerve centers may be ever so willing to direct the functions of life in the different organs, but if the connecting link, or nerve force, be weakened, the direction of these centers cannot terminate in complete normal action, and if this force be nearly deficient, paralysis results, and when totally deficient, life must cease. Magnetism applied properly, is taken up by these peripheral nerves, and the nerve force replenished thereby, either as a stimulant or a tonic; probably the latter, as it not only increases action, but strengthens and builds up. At first relief is afforded, but later, when the force has been supplied sufficiently to enable nature to regain complete control of her forces, a cure is affected. It is plain to see that Magnetism thus restores the normal action of the various organs, corrects the circulation, the heart's action, digestion, absorption, assimilation, secretion, excretion, etc., and it is equally plain that this result in a *radical, positive cure,* as soon as waste and decay can be replaced. Magnetism can not fail in these cases when properly applied. Now comes the question of the application.

The essence of Appliances must necessarily be in the kind and quality of the Magnets used. We have arranged with the only chartered company in the U. S. to fill our orders for these Appliances. They use only the best tempered, rolled steel wire for Magnets. The temper is an essential feature to their permanency. A well tempered piece of the right kind of steel makes a perfect and permanent Magnet, if the laws relating to polarity are recognized in making up into Appliances. They are insulated with rubber to keep from rusting, encased in fine, rich, durable fabrics, and made up into neatly-fitting, beautiful and comfortable Appliances for every part of the body. We furnish only one grade of Magnets, the best, and use them in all Appliances. They are all worn over the underclothing, not touching the skin and requiring no acids and no re-charging. These Magnets are each one charged separately, polarized, tested, and laid properly. This is the only way they can be made permanent. Drugs have their proper sphere, and to that sphere they should be confined. They do not clash with these Appliances, but, on the contrary, they work together nicely. In multitudes of instances, the Appliances will put the system in condition to respond to medical remedies. In this respect they prove

An Aid to the Physician; a Boon to the Patient.

Different Ailments Require Different Appliances.

Vests, Belts and Lung Protectors are the true curative Appliances. The smaller ones are local Appliances, and intended more for local effect or relief. The nerve centers are the brain, spinal cord and sympathetic ganglia. It has been shown by experiments on animals that the control of certain organs and parts of the body is located in separate and distinct parts of the spinal cord or sympathetic ganglia While some effect can be had through other centers, yet the effects are much more decided and more easily obtained through the principal centers in relation to the affected organ or part. It is therefore our aim to make the application locally over the part affected, and with Vest, Belt, or Lung Protector over the nerve centers, as the case may require, seemingly phenomenal results follow.

It is the aim first to attack the nerve centers which control the affected organs or parts, and then with the local Appliances to assist or quicken the restorative processes at the apparently affected parts.

Perhaps no portion of humanity suffer more than do our tired and overworked mothers. It is equally true that they are easily and readily benefited by Magnetic Appliances. The Abdominal Belt or Supporter with a pair of Insoles or Foot Batteries, works wonders for women. Their powers of endurance are frequently more than doubled in this way.

And others who have to stand on their feet all day are immeasurably benefited and strengthened by a Belt and Insoles, the Insoles alone frequently accomplishing wonders in this direction.

In looking about for the BEST Appliances, we have also made selection of those which were the lowest in price, as the large sales of this Company enable them to furnish these goods much lower than those selling not more than a quarter or a tenth part as many. We still find that prices are not within the reach of many, and that the poor, as well as the rich, may be benefited, we give the lowest prices at which these Appliances are sold for cash by the manufacturers, and from these prices we will allow our subscribers to deduct 25 per cent. Thus the best Magnetic Insoles or Foot Batteries are sold at $1.00, we furnish them for 75 cents, by mail, postage paid, and send *THE WESTERN WORLD, ILLUSTRATED,* for one year. The same discount made on each article.

MAGNETIC VESTS

are placed first because the largest and best of Appliances. They are made to order, and when neatly fitted, their value can not be overestimated. As they cover the entire trunk, all the vital organs and the whole length of the spinal column, every intelligent person must see at a glance the wonderful effect such a Vest necessarily has upon the great nerve centers. They are peculiarly well adapted to constitutional ailments: General Debility, Nervous Debility, Dyspepsia, Asthma,

Consumption, Liver Troubles, Rheumatism of the Heart, Spinal Troubles, Paralysis, Locomotor Ataxia, and under all circumstances where a general building up of the system is needed. Often medicines fail to act because nature can not react. These Vests will be found an invaluable aid to physicians and a boon to the sufferer in such cases. Bear in mind that the Vests are frequently necessary to cure, and will cure where the Belts will not. **Price, $25.00.**

THROAT APPLIANCE,

or Throat Shield, as it is sometimes called, is an exceptionally fine remedy for Throat Troubles, Bad Colds, Hoarseness, Quinsy, Diphtheria, etc. We wish we could emphasize this sufficiently that every mother in the land would get and keep one for use among the children, especially for Croup or Hoarseness, as they relieve almost instantly, scattering the congestion as by magic.

Price, $3.00.

LUNG PROTECTORS

are made to cover both chest and back. Some people imagine that nothing is needed on the back to protect the lungs. Let such person sit with his back facing the wind and see how much quicker he will take cold than when facing it. Make in two sizes; one for ladies and one for gentlemen. For all ailments of the lungs these are the best possible Appliances. For all ailments of the upper part of the trunk, this is next best to the Vest, and when worn with Belt, makes quite a good substitute for the Vest.

Prices, Lady's, $7.50; Gent's, $10.

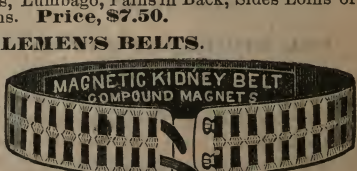
LADIES' BELTS

or Supporters. Woman's Special Abdominal Belt or Supporter affords perfect support for the abdomen, resting the tired and weakened muscles, the Magnetic Aura penetrating and permeating the abdominal viscera, invigorating and toning up the vital organs. The support is similar to that given by clasping the hands over the lower part of the abdomen and lifting upward and backward. Try it and see what a relief it is. They relieve instantly and in time

cure, Backaches, Weariness, Tired or Wornout Feelings, Bearing Down or Dragging Sensations in the loins or hips; Constipation, Indigestion, Kidney Troubles, Lumbago, Pains in Back, Sides Loins or Hips, or Abdominal regions. **Price, $7.50.**

GENTLEMEN'S BELTS.

Two-Row Compound Belt offers but little support. It is, however, quite strong and powerful, and is perfectly successful nineteen times in twenty. Its cheapness makes it popular.



The Three-Row Belt gives a most perfect support to the abdomen and back, fitting the back like a glove.

The Four-Row Belt is applicable to old chronic cases, and is the best and most powerful Belt. These belts should be worn for Lame Back, Weak Kidneys, Constipation, Rheumatism, Lumbago, Dyspepsia and Nervous Debility.

PRICES.

Two Rows Compound Magnets	$ 5 00
Three Rows Single Magnets	7 50
Three Rows Compound Magnets	10 00
Four Rows Single Magnets	12 00
Four Rows Compound Magnets	15 00

The Magnetic **Skull Cap** can be worn as an ordinary office cap. It is beautifully made and a beautiful shape. Nine times in ten they will cure a Nervous or Neuralgic Headache in five minutes. They relieve Catarrhal Headaches at once, and will cure most cases of ordinary Catarrh if worn from three to six months.

Price, Black Silk, **$5.00**.

The **Sleeping Cap** or Head Band is excellent for nervous, irritable people, who have trouble in getting to sleep.

It gives sound, refreshing sleep the first night worn. Not so powerful as the Cap.

Price, $2.00.

The Magnetic Friction Mitten should be used in all cases of Restlessness, Sleeplessness, Paralysis, Nervousness, General Debility, etc., as an aid to the larger Appliances, and is, in fact, a luxurious necessity to all. By its use the millions of peripheral nerve fibres in the skin are stimulated and filled anew with life and vigor, the pores of the skin opened up and their excretory functions enlivened, and the blood is drawn to the surface.

In view of these *facts* does any one believe that the use of this Friction Mitten will *not* prove beneficial? It is used and recommended by physicians generally.

Price, $2.00.

THE SHOULDER APPLIANCE

is very useful in Rheumatism of the Shoulder, Lame or Sprained Shoulder, and Paralysis of Arms. It covers the shoulder well.

Price, $5.00.

Wristlets should be used in cases of Writer's Cramp or Pen Paralysis, and as an auxiliary to Vest or Belt in correcting Poor Circulation, Cold Hands and Arms, and for Rheumatism in Hands. Ordinarily they are made about six inches wide, and long enough to reach around the arm.

Price, $2.00.

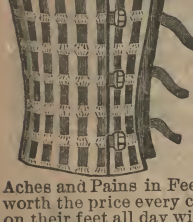
The **Knee Cap** is especially valuable in cases of Rheumatism of the Knee Joint, White Swelling, and Lameness in the Knees, or as an aid to the Vest in Paralysis. It is merely a local Appliance, and while it may not be powerful enough to cure in all cases, yet it will always afford relief. It fits perfectly. **Price, $3.00.**

The **Upper Leggin** or Sciatic Appliance is well adapted to relieve imperfect circulation in the limbs, and with Vest for Paralysis, and is indispensable in Sciatic Rheumatism.

Price, $5.00.

The **Lower Leggin** is invaluable in all cases of poor or enfeebled circulation. It is very necessary in Paralysis to get up and keep up proper circulation. It should also be used for Rheumatism of lower limbs, Varicose Veins, Lameness, Swelling, Sprains, etc.

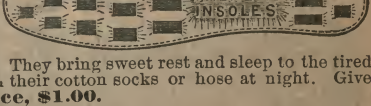
Price, $5.00.



The **Anklet** is applied to Rheumatic, Sprained, Lame, Sore or Painful Ankles, with excellent results. Next to Lower Leggin for benefiting poor circulation.

Price, $3.00.

The Magnetic **Insoles** or Foot Batteries are sold by thousands. While it is not claimed, they perform wonderful cures, they do warm the feet, cure Rheumatism in feet, Chilblains, Aches and Pains in Feet and Limbs. They wear all winter and are worth the price every cold or damp day. People who have to stand on their feet all day will find these Insoles invaluable. The feet are wonderfully susceptible to the influence of Magnetism. They double one's powers of endurance under such circumstances. They bring sweet rest and sleep to the tired and weary when worn in their cotton socks or hose at night. Give size of shoe worn. **Price, $1.00.**



The **Scrotal Suspensory** is the safest and most effectual remedy for any weaknesses or diseases of Males. It is worn without in-

convenience, and its effects are noticed at once. Circulars giving full information mailed upon application. Price, by mail, **$5.00.**

A discount of 25 per cent. is allowed Subscribers by us on any of these Appliances, and a copy of THE WESTERN WORLD, ILLUSTRATED, included with each article.

MEASURES.

For VESTS, give waist, bust and hip measures, length of spine, length in front from collar button as low as desired. State any peculiarity of form, and whether for man or woman.

For CORSETS, waist measure.

For BELTS, snug waist measure.

For ABDOMINAL SUPPORTER, waist and hip measure.

For LUNG PROTECTOR, bust measure.

For HEAD CAPS, size of hat.

For UPPER LEGGIN, size just above the knee.

For LOWER LEGGIN, size at ankle and at calf of leg.

For ANKLET, size of ankle.

For KNEE CAP, size of knee.

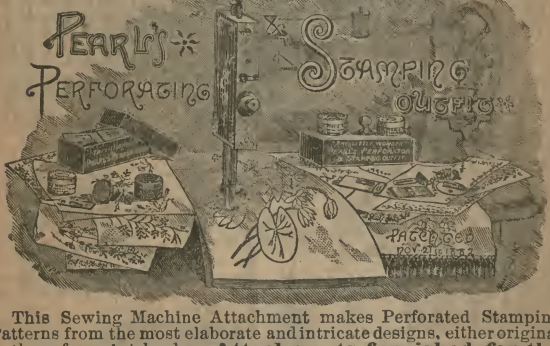
For SHOULDER APPLIANCE, armhole and arm just below armhole.

For WRISTLET, size of wrist.

For INSOLES, size of shoe.

Usually no measures are necessary for other appliances. Use tape line and give measure in inches, except for Head Caps and Insoles.

LADIES, MAKE YOUR OWN STAMPING PATTERNS.

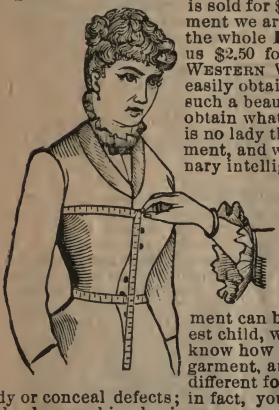


This Sewing Machine Attachment makes Perforated Stamping Patterns from the most elaborate and intricate designs, either original or those from Art books. **Attachments furnished for the following Machines ONLY:** Light Running Domestic; Wheeler & Wilson, No. 8; Remington, No. 3; White; Household, double or single feed; Weed "New Hartford;" New Home; Singer Improved; Elias Howe and New Howe "G." In case you do not have one of the above machines—possibly your neighbor has, and would allow you to use it in exchange for some patterns. Name your machine with your order. **THE PEARL PERFORATING AND STAMPING OUTFIT** embraces 1 patent Perforating Attachment; 9 Assorted Punches; one box White Stamping Powder; one box Blue Stamping Powder; 1 Improved Reversible Stamping Pad, together with a book of explicit instructions for its adaptation and use in perforating and stamping of every description, all enclosed in a handsome case. By mail, **$1.50**, including Paper.

EVERY LADY HER OWN DRESSMAKER.

Prof. Moody's New Tailor System of Dress Cutting Sent FREE to Those Who will send Us Subscribers.

Prof. Moody's New and Perfect System for Dress Cutting, including book with instructions for Cloak and Dressmaking, Charts, etc., is sold for $7 or $8, but by a special arrangement we are able for a limited time to send the whole **FREE** to any one who will send us $2.50 for ten yearly subscriptions to THE WESTERN WORLD, ILLUSTRATED. Any lady can easily obtain ten subscriptions, at 25c each, to such a beautiful publication as ours, and thus obtain what she will prize very highly. There is no lady that does not like a well-fitting garment, and with this system any person of ordinary intelligence can fit perfectly any and all garments worn by woman or child.



All instructions are illustrated and made perfectly plain and easy to understand. Diagrams on strong cardboard accompany the instructions, and by this system of measurement a draft is made directly on the cloth, and a garment can be fitted to the largest lady or smallest child, without trying it on. You will also know how much goods to buy for any style of garment, and how to fashion waists, and fit to different formed persons, and be able to remedy or conceal defects; in fact, you will soon know all the secrets of the dressmaking business.

What we are offering to you **FREE** will be of great value and last a lifetime. For $1 we will send the System and 1 copy of paper.

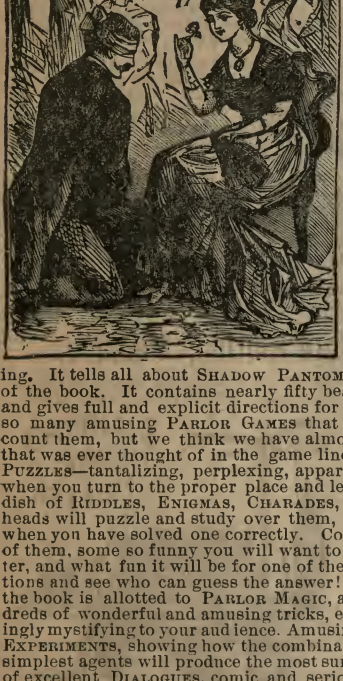
The Dana-Bickford Knitting Machine.

This Machine is especially adapted for knitting coarse wool, ordinary three-ply socks, mittens, leggins, scarfs, tidies, mats, afgans, and all varieties of work where coarse wool, Germantown worsted and very coarse cotton are used. All of the finer cylinders fit this machine, and can be bought separately at any time. All machines knit both flat and tubular web, narrowing or widening at will, knitting a sock complete, commencing at the toe.

The following articles belong to and accompany each Machine, viz.: Bobbin Winder, three Bobbins, Swift, Oiler, Setup and Looper, Long Needle, Weight Hook, four Weights, Buckle, six extra Needles and Illustrated Instruction Book. Price, No. 1, Family Machine, with one Cylinder, 72 Needles, 12 Gauge, **$30.00.** THE WESTERN WORLD, ILLUSTRATED, and Guide included.

THE COMPLETE BOOK OF HOME AMUSEMENTS.

What most lives need is MORE SUNSHINE. Let us banish care, have a good time, enjoy ourselves while we may. How much happier—how much better off—are these homes wherein the father and mother, and even the gray-haired grand-parents, join with the children after tea in a merry game or other amusement, than those wherein reticence and reserve and chilly demeanor prevail. "But," you say, "what shall we do? We read until we are tired; and we know of no amusement that we care for. How shall we employ the long winter evenings?" We have published a book to answer this question, and a wonderful book it is. It contains 64 large 3-column quarto pages, neatly bound in handsome covers, and is filled to the brim with every conceivable thing for the enlivenment of home. It is in reality *four books in one*, for it covers the ground usually occupied by four distinct volumes, and contains four times as much matter as any book published at the same price. It is a complete text book for Public and Private Entertainments, Private Theatricals, Parlor Exhibitions, Social Gatherings, School Exhibitions and Evenings at Home. It is a book for old and young, grave and gay—a veritable storehouse of good things for all. It contains a number of ACTING CHARADES, with full directions how to perform them. It gives some very excellent PARLOR DRAMAS, easily acted, yet very amusing. It tells all about SHADOW PANTOMIMES, alone worth the price of the book. It contains nearly fifty beautiful TABLEAUX VIVANTS, and gives full and explicit directions for performing them. In it are so many amusing PARLOR GAMES that we have not attempted to count them, but we think we have almost everything, new and old, that was ever thought of in the game line. Wonderful ILLUSTRATED PUZZLES—tantalizing, perplexing, apparently intricate, but *so easy* when you turn to the proper place and learn the answers. A savory dish of RIDDLES, ENIGMAS, CHARADES, ETC. How young and old heads will puzzle and study over them, and how proud you will feel when you have solved one correctly. CONUNDRUMS, *nearly a bushel* of them, some so funny you will want to hold your sides with laughter, and what fun it will be for one of the company to read the questions and see who can guess the answer! A considerable portion of the book is allotted to PARLOR MAGIC, and here you will find hundreds of wonderful and amusing tricks, easily performed, yet exceedingly mystifying to your audience. Amusing and instructive CHEMICAL EXPERIMENTS, showing how the combination and manipulation of the simplest agents will produce the most surprising results. A number of excellent DIALOGUES, comic and serious, suitable for school exhibitons or parlor entertainments. The book contains nearly fifty of the finest RECITATIONS, dramatic, pathetic, sentimental and comic, ever written. It is handsomely illustrated, and is a splendid book. Sent by mail, post paid, upon receipt of only **25 Cents,** and **35 Cents** for Book and THE WESTERN WORLD, ILLUSTRATED.



The Popular History of

The Civil War.

Almost a multitude of books directly bearing upon the Rebellion have been published. Yet it is our firm belief that the War Histories heretofore published are but meagerly adapted to the wants of the masses of American citizens to-day: first, because they are too expensive, involving an outlay greater than the majority of people can afford to make; and, second, because they are too lengthy, going so minutely into particulars and details that they become dry and uninteresting. This work is most aptly and appropriately entitled "The Popular History of the Civil War," because it meets the *popular* demand for an authentic history of the Rebellion, written in the most entertaining manner and published at a price within the reach of all. The book is a thorough, complete and authentic history, not only of every important battle and naval engagement that occurred during the war, but is likewise very complete in its treatment of the political conditions, sectional differences and other causes which brought on the great conflict. It is just such a war history as every American citizen should possess, and will prove of the utmost interest and value, not only to those who well remember, and some of whom participated in the war for the Union, but especially to that large class who have grown to manhood and womanhood long since the war closed. The new edition of this book, now offered, is greatly enlarged, both as to size of page and number of pages, and contains, in addition to the history proper, a sketch of **The Grand Army of the Republic**, by a prominent officer of the organization, likewise an appendix devoted to **Anecdotes of the Rebellion**, containing a large collection of humorous, pathetic and thrilling narratives of actual experiences during the war. "The Popular History of the Civil War" is a large book of 544 pages, 12mo, handsomely printed in large type upon fine paper, and elegantly bound in cloth, embellished with designs in black and gold. It is profusely and elegantly illustrated, the engravings representing scenes of the prominent battle-fields and naval engagements, camp life and picket duty, likewise portraits of the great Generals, both Union and Confederate, and other prominent men upon both sides who were identified with the struggle. The book will be sent by mail, post-paid, upon receipt of **$1.60**. A year's subscription to THE WESTERN WORLD, ILLUSTRATED, included with each History.